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Gas Househeating survey: 1982

PRESENT AND PROSPECTIVE HOUSEHEATING CUSTOMERS

AGA
American Gas Association

GAS HOUSEHEATING SURVEY: 1982

35th Annual Survey
Gas Utility Industry
United States

Househeating Customers, 1982
Unit Additions—Conversions and New Housing, 1982-1983
Gas Utility Customer New Hook-Up Requirements, 1982
Competitive Fuel Prices, 1982

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Introduction

This report presents the results of the 35th Annual Gas House-heating Survey conducted by the American Gas Association. Data collected for 1982, as well as projected data for 1983, provide a comprehensive portrait of the residential gas market by state and region, including customers, fuel prices, anticipated inventory additions from new homes and conversions, and existing requirements on new customer hook-ups.

A total of 161 gas utility companies, serving 89% of the nation's residential gas customers, responded to this year's survey. The information provided by these utilities was expanded to obtain the state and national totals shown in Tables 4 and 6. Individual company data are listed by region and state in Appendices 1 and 2. Please note that some tabular data may not add to totals due to rounding.

The American Gas Association wishes to thank those companies who participated in the survey for making this publication possible.

I. Executive Summary

- There were 45.1 million residential gas customers by year-end 1982, an increase of 1.7% over 1981. Of this total, approximately 88%, or 39.8 million, were househeating customers.

- Natural gas continued to be the leading househeating fuel in the United States, with about 56% of the home heating market in 1982. Fuel oil dropped to 17%, electricity increased slightly to 19%, while all other fuels (wood, coal, etc.) remained constant at 8%. In the new housing completions market, gas' share of single and multifamily unit completions dropped to 35% in 1982 from 38% in 1981, while electricity's share increased to 57% from 55%.

- Regionally, gas-heated housing is most prevalent in the North Central states, maintaining a 71% share of the market. In the Northeast region, gas increased its share to 42% in 1982, up from 37% in 1978. In all regions except the Northeast, gas had the largest market share of heated homes.

- The addition of new gas househeating units from conversions of existing units and new housing combined totalled 622,203 in 1982 to reach a total of 46.6 million gas heated units, an increase of 1.1% over 1981. This includes both single and multifamily units.

- Conversions from alternative fuels to gas househeating were 244,829 in 1982, a substantial decline from the record conversion levels of the past two years. However, this is still well above the average conversion levels of the 1970s. Additions from new housing numbered 377,374 in 1982, an 18% decline from the 1981 level. However, this 18% decline in additions from new housing is consistent with the 20% decline in housing completions for 1982 compared to 1981.

- Based on survey data, 213,330 or 87% of all heating conversions, were from fuel oil to gas. Regionally, 99% of all conversions in the New England region and 96% in the Middle Atlantic region were from fuel oil to gas, 94% in the South Atlantic region, and 83% in the Pacific region. The remaining conversions to natural gas were 14,889 converting from LPG, 11,534 from electricity and 5,076 from "other fuels" (i.e., coal, wood, etc.).

- Utility estimates for 1983 indicated that the number of conversions is expected to decline to approximately 179,000 units. This projection of conversions is lower than the previous four years and is comparable to the levels that prevailed during the 1970s.

- In 1982, several utilities reported some form of new hook-up requirements (or restrictions), primarily conservation-oriented and main extension requirements. For example, some new customers were required to meet minimum insulation or structural standards set by state authorities. Other customers were required to pay a surcharge to cover the financing of the main extension. In most cases, new customers were still added.

- Shipments of gas warm air furnaces declined in 1982, down 18% from 1981. Gas boiler shipments were off 9% in 1982. Gas wall and floor furnace shipments, however, rose 4% and 78%, respectively. Electric warm air furnace shipments declined 24% in 1982, while shipments of oil warm air furnaces increased 27%. Total manufacturers' shipments of residential heating equipment declined 16% in 1982, while shipments of gas heating equipment declined 15% compared to 1981.

- Conservation, reported as the total percentage decline in consumption per customer since 1973 by companies representing 82% of the gas househeating customers in the United States, averaged 21.1% below the 1973 consumption level. Regionally, the conservation level ranged from a high of 27.9% in the Mountain division to a low of 13.9% in the West North Central division.

II. United States Housing Market In 1982

Existing Housing

There were an estimated 83.8 million occupied housing units in the United States in 1982, a 0.7% increase over 1981. Of this total, 46.6 million, or 56%, were units which used natural gas for heating (see Table 1). A regional breakdown of the 46.6 million gas heated units found 16% in the Northeast, 33% in the North Central, 28% in the South, and 23% in the West.

Between 1978 and 1981 the number of gas househeating units in the United States grew at an annual rate of about 1.9%, a growth rate reflecting a period of record conversions. The 1982 estimate of 46.6 million gas heated units is a 1.1% increase over the 1981 total, a decline in the annual growth rate compared to the 1978-81 period.

As a percentage of total homes, electrically heated units rose slightly to 19% in 1982 with a total of 15.9 million units. This is an average annual increase of 5.3% since 1978. The number of units heated with fuel oil continued to decline, falling to 14.2 million in 1982, or 17% of the total. The number of homes heated by other fuels (wood, coal, solar, etc.) has maintained a steady 8-9% market share for the past 5 years, totalling about 7.1 million units in 1982.

In all regions, except the Northeast, gas had the largest market share of heated homes. Gas heated housing is most prevalent in the

Table 1

TOTAL U.S. RESIDENTIAL HOUSING BY HEATING FUEL
1978-1982

(Thousands of Occupied Units[a])

	Actual				Estimate	
	1978	1979	1980	1981	1982	1982 Market Share
United States	77,167	78,572	80,073	83,175	83,800	100
Gas	42,522	43,322	44,398	46,084	46,600	56
Electric	12,258	13,244	14,207	15,486	15,900	19
Oil[b]	16,072	15,708	14,867	14,494	14,200	17
Other[c]	6,315	6,298	6,601	7,111	7,100	8

[a] Units include both single and multifamily.

[b] Oil includes kerosene.

[c] Other includes LP gas, coal, wood, solar, and none.

Source: U.S. Bureau of the Census, Annual Housing Survey: General Housing Characteristics, 1978-1981. A.G.A. estimate for 1982 derived by adding number of dwellings completed by fuel type, as reported by U.S. Bureau of Census, Construction Reports - Series C-25, June 1983, to 1981 actual data, considering also the net gains and losses as a result of fuel switching and demolitions.

North Central states, maintaining a 71% share of the market. In the Northeast region, where oil heated homes are dominant, gas increased its market share to 42% in 1982 (see Table 2), up from 37% in 1978 and 41% in 1981.

New Housing

The number of new private housing starts (seasonally adjusted) in 1982 fell to 1.06 million units, a 2% decline from 1981 (see Figure 1). Construction of single family homes dropped 6% to 662,000, while the construction of multifamily units actually increased by 6 percent to 400,000.

Recent housing-start data indicate that a recovery is under way, following the worst 2 years for housing in the postwar period. Privately owned housing starts in June 1983 were at a seasonally adjusted annual rate of 1.75 million starts.[1/] This is 92% above the June 1982 rate. Wharton Econometric Forecasting Associates (WEFA) has predicted that 1983 starts would average 1.6 million units. WEFA expects the housing market to experience continued recovery over the following two years, with starts nearing 1.86 million in 1984 and 1.94 million in 1985.

The housing industry slump in 1982 is further evidenced by the decline in the number of unit completions[2/] (which lag housing starts by about 6 months) to 1.0 million in 1982, a decrease of 20% compared to 1981 (see Table 3). However, over the same period gas' share (including LPG) of new units actually declined from 38% to 35%, while the percentage of new units using fuel oil rose from 2% to 3%. Electricity increased slightly to a 57% share, while units using other fuels remained at 5%. Continued competition from electricity, especially the electric heat pump, has prevented gas heating from regaining the dominant position in the new housing market it held in the 1960s and early 1970s. However, through increased supply availability at competitive prices and the introduction of new, high efficiency gas furnaces and boilers (i.e., seasonal efficiencies of up to 96% versus 60% for conventional equipment), gas will be able to compete effectively against electricity in the future.

1/ Source: U.S. Department of Commerce, Bureau of Census, Construction Reports - Housing Starts, June 1983, Series C-20.

2/ A house is defined as completed when all finished flooring has been installed (or carpeting if used in the place of finished flooring). If the building is occupied before all construction is finished, it is classified as completed at the time of occupancy. In privately owned buildings with two or more units, all the units are counted as completed when 50% or more are occupied or available for occupancy.

Table 2

REGIONAL HEATING FUELS AND
MARKET SHARES FOR RESIDENTIAL HOUSING, 1978-1982

(Thousands of Occupied Units[a])

Region and Fuel	Actual				Estimate	
	1978	1979	1980	1981	1982	1982 Market Share
Northeast	16,952	17,123	17,264	17,852	17,900	100
Gas	6,301	6,558	6,928	7,335	7,500	42
Electric	999	1,109	1,169	1,281	1,300	7
Oil[b]	9,253	9,056	8,685	8,642	8,500	48
Other[c]	399	400	482	594	600	3
North Central	20,171	20,565	20,842	21,564	21,600	100
Gas	14,140	14,428	14,688	15,308	15,400	71
Electric	1,685	1,864	2,036	2,210	2,200	10
Oil[b]	2,817	2,724	2,502	2,328	2,300	11
Other[c]	1,529	1,549	1,616	1,718	1,700	8
South	25,094	25,585	26,286	27,430	27,800	100
Gas	11,956	12,054	12,290	12,725	12,800	46
Electric	6,561	7,074	7,615	8,225	8,600	31
Oil[b]	3,263	3,191	3,009	2,905	2,800	10
Other[c]	3,314	3,266	3,372	3,575	3,600	13
West	14,950	15,299	15,681	16,329	16,500	100
Gas	10,125	10,283	10,492	10,716	10,900	66
Electric	3,013	3,197	3,388	3,770	3,800	23
Oil[b]	739	737	671	619	600	4
Other[c]	1,073	1,082	1,130	1,224	1,200	7

[a] Units include both single and multifamily.

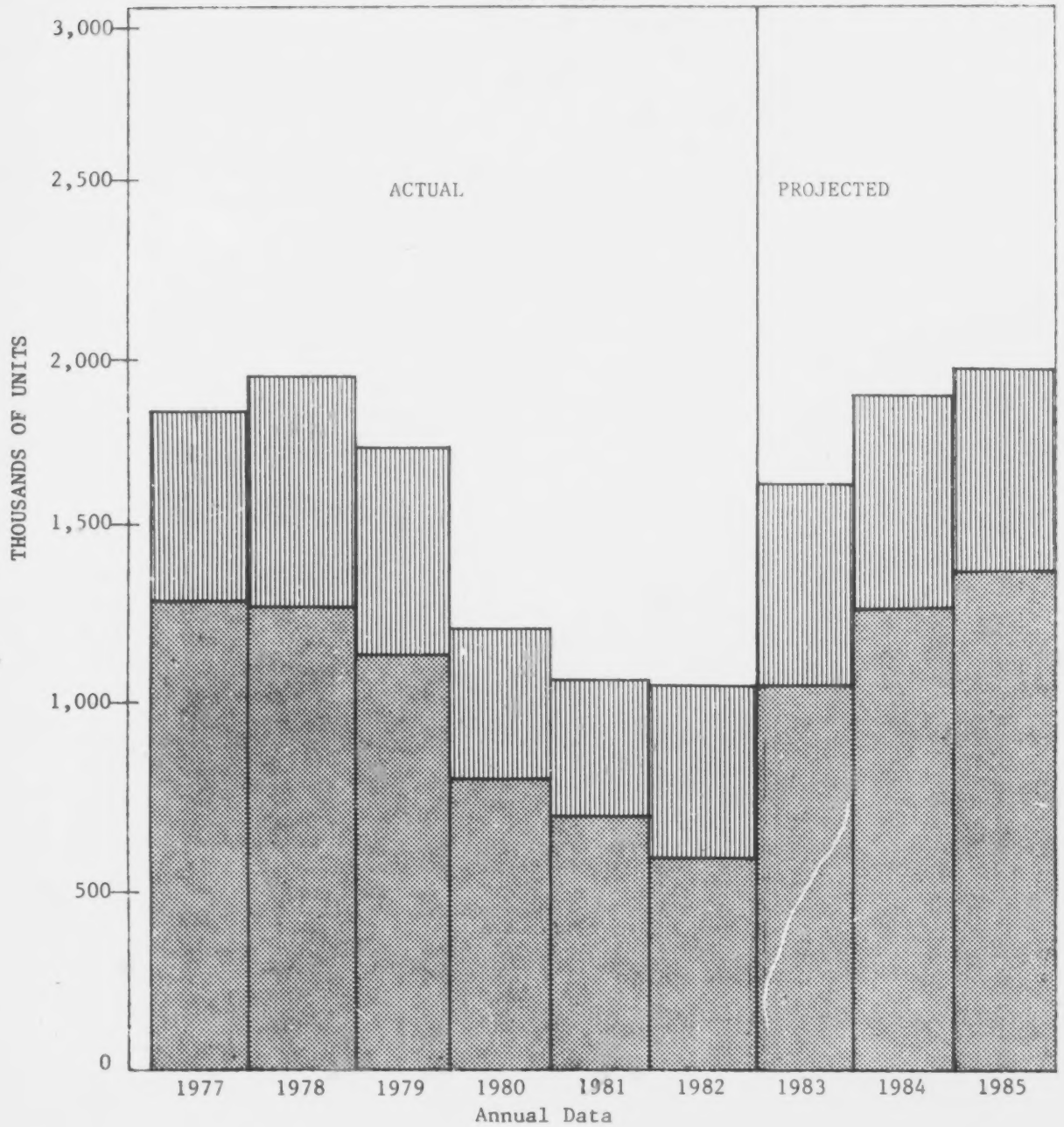
[b] Oil includes kerosene.

[c] Other includes LP gas, coal, wood, solar, and none.

Source: U.S. Bureau of the Census, Annual Housing Survey: General Housing Characteristics, 1978-1981. A.G.A. estimate for 1982 derived by adding number of dwellings completed by fuel type, as reported by U.S. Bureau of Census, Construction Reports - Series C-25, June 1983, to 1981 actual data, considering also the net gains and losses as a result of fuel switching and demolitions.

Figure 1

NEW RESIDENTIAL HOUSING STARTS ACTUAL AND PROJECTED
1977-1985



Source: Actual--U.S. Bureau of the Census, Construction Reports-Series C20, Housing Starts, May 1983.

Projected--Wharton Econometric Forecasting Associates Long Term Model, Baseline Forecast, June, 1983.

Table 3

RESIDENTIAL HOUSING COMPLETIONS BY HEATING FUEL TYPE 1978-1982
(Thousands)

Heating Fuel Type	1978		1979		1980		1981		1982	
	Number	%	Number	%	Number	%	Number	%	Number	%
Total Completions[a]	1,869	100	1,870	100	1,502	100	1,265	100	1,006	100
Electricity	1,049	56	1,048	56	844	56	700	55	570	57
Gas[b]	642	35	662	35	559	37	481	38	355	35
Oil[c]	133	7	113	6	41	3	23	2	26	3
Other or None	45	2	47	3	58	4	61	5	55	5

[a] Includes both single and multifamily units.

[b] Includes Liquefied Petroleum Gas, estimated to be about 6% of total gas completions.

[c] Includes kerosene.

Source: Bureau of Census, Characteristics of New Housing: Series C-25, 1978-1982, June 1983.

III. Residential Gas Customers in 1982

Total Residential Customers

With net customer additions of 766,300, the total number of gas customers[3/] exceeded 45.1 million in 1982, a 1.7% increase over 1981 (see Table 4). Two regions, the Northeast with 183,500 new customers and the West with 409,900 new customers accounted for 77% of all new residential customer additions.

Househeating Customers

About 39.8 million, or 88.2% of all 1982 residential gas customers were househeating customers. The gas househeating/total residential gas customer ratio, i.e., market saturation, remained basically unchanged versus 1981. In spite of the slowdown in the housing industry, househeating customer net additions totalled 603,700 in 1982. This included existing gas baseload customers who converted their heating system to gas, as well as customers added through new construction and conversions from alternative fuels.

Gas Househeating Unit Additions

The gas industry added 622,203 househeating units in 1982 (see Table 4), a 32% decline from 1981. Of total additions, 61%, or 377,374 were from new housing,[4/] a decrease in actual units of 18% from 1981 due to the decline in the housing industry, although it does represent an increase in the share of househeating additions from new housing to 61% from 51% in 1981. The West showed the highest ratio of additions from new housing versus conversions, 91%, whereas, the Northeast showed only 24% from new housing.

In 1982, 244,829 housing units were converted from an alternative fuel to natural gas (see Table 4), a decline from the record level of conversions reported in the two previous years. This represents a 46% decrease from the near record 1981 level of 451,612 conversions. The actual number of 1982 conversions fell short of the 1980 forecast of 303,800 made by responding companies in early 1981, by 19%.

3/ At most utilities a residential customer is defined as an individual or organization purchasing gas for domestic purposes (heating, cooking) at one location under one rate classification, i.e., a meter represents a single customer.

4/ Because of inconsistencies in the definition of a completed housing unit (used by the Bureau of the Census) and an on-line gas customer (used by a gas utility), the number of gas heated housing units added from new construction reported in the survey does not match the Census figures shown in Table 3.

Table 4

RESIDENTIAL AND HOUSEHEATING CUSTOMERS OF GAS UTILITIES,
AND 1982 HOUSEHEATING UNIT ADDITIONS,
BY STATE, AS OF DECEMBER 31, 1982

(Thousands)

Region, Division and State	Residential Customers			1982 Househeating Unit Additions From New Housing and Conversions				
	Total	House Heating	Percent Heating	Total (100%)	New Housing Number	New Housing (%)	Conversions Number	Conversions (%)
UNITED STATES	43,090.4	39,755.3	88.2	622.2	377.4	61	244.8	39
NORTHEAST	9,360.7	5,920.3	63.2	134.4	32.5	24	101.9	76
New England	1,686.2	1,126.4	66.8	25.3	7.2	28	18.1	72
Connecticut	383.1	247.2	64.5	11.9	2.7	23	9.2	77
Maine	12.7	9.6	75.5	1.6	0.2	12	1.4	88
Massachusetts	1,068.4	709.0	66.4	10.0	3.4	34	6.6	66
New Hampshire	45.8	36.8	80.5	1.2	0.6	50	0.6	50
Rhode Island	162.1	112.1	69.2	0.2	0.1	50	0.1	50
Vermont	14.1	11.7	82.8	0.4	0.2	50	0.2	50
Middle Atlantic	7,674.5	4,793.9	62.5	109.1	25.3	23	83.8	77
New Jersey	1,711.0	1,043.3	61.0	37.0	8.8	24	28.2	76
New York	3,729.6	1,885.1	50.5	49.4	7.6	15	41.8	85
Pennsylvania	2,233.9	1,865.5	83.5	22.7	8.9	39	13.8	61
NORTH CENTRAL	14,029.6	13,297.1	94.8	136.9	67.4	49	69.5	51
East North Central	10,137.4	9,509.0	93.8	99.2	41.6	42	57.6	58
Illinois	3,053.6	2,686.7	88.0	32.7	12.6	39	20.1	61
Indiana	1,180.8	1,133.7	96.0	16.2	4.4	27	11.8	73
Michigan	2,334.9	2,248.7	96.3	19.5	11.1	57	8.4	43
Ohio	2,583.4	2,555.9	98.9	17.2	10.3	60	6.9	40
Wisconsin	984.8	884.0	90.0	13.6	3.2	24	10.4	76
West North Central	3,892.2	3,788.1	97.3	37.7	25.8	68	11.9	32
Iowa	688.6	670.2	97.3	3.9	2.5	64	1.4	36
Kansas	671.7	670.1	100.0	2.1	2.1	100	b	b
Minnesota[a]	783.1	745.6	95.2	19.2	10.8	56	8.4	44
Missouri	1,137.5	1,104.5	97.1	9.3	7.6	82	1.7	18
Nebraska	435.0	427.9	98.4	3.1	2.8	90	0.3	10
North Dakota	80.4	75.7	94.1	0.1	b	b	0.1	100
South Dakota[a]	95.9	94.1	98.1	b	b	b	b	b
SOUTH	11,107.2	10,506.2	94.6	195.8	136.2	70	59.6	30
South Atlantic	3,862.2	3,511.0	90.9	108.2	53.4	49	54.8	51
Delaware	78.9	52.3	66.2	1.6	0.5	31	1.1	69
Dist. of Columbia	132.6	95.9	72.3	7.5	0.5	7	7.0	93
Florida	413.6	404.6	97.8	9.2	7.6	83	1.6	17
Georgia	998.8	997.1	99.8	29.7	28.7	97	1.0	3
Maryland	735.5	575.3	78.2	17.4	5.1	29	12.3	71
North Carolina	367.4	359.4	97.8	11.0	3.2	29	7.8	71
South Carolina[a]	261.6	230.8	88.3	b	b	b	b	b
Virginia	512.9	441.8	86.1	30.2	6.4	21	23.8	79
West Virginia	360.9	353.8	98.0	1.6	1.4	88	0.2	12
East South Central	2,028.7	1,993.8	98.3	14.5	11.2	77	3.3	23
Alabama	624.9	621.3	99.4	5.0	3.6	72	1.4	28
Kentucky	575.1	568.0	98.8	3.1	2.0	65	1.1	35
Mississippi	372.6	372.5	100.0	2.5	2.1	84	0.4	16
Tennessee	456.1	432.0	94.7	3.9	3.5	90	0.4	10
West South Central	5,216.3	5,001.4	95.9	73.1	71.6	98	1.5	2
Arkansas	469.4	469.4	100.0	b	b	b	b	b
Louisiana	944.4	935.4	99.0	b	b	b	b	b
Oklahoma	774.5	756.1	97.6	20.9	20.8	99	0.1	1
Texas[a]	3,028.0	2,840.5	93.8	52.2	50.8	97	1.4	3
WEST	10,592.9	10,031.7	94.7	155.1	141.3	91	13.8	9
Mountain	2,597.4	2,566.3	98.8	42.8	40.8	95	2.0	5
Arizona	545.7	523.4	95.9	2.5	2.5	100	b	b
Colorado	807.9	807.7	100.0	21.0	21.0	100	b	b
Idaho	100.0	97.9	97.9	2.0	0.7	35	1.3	65
Montana	167.5	166.9	99.7	b	b	b	b	b
Nevada	178.0	176.3	99.0	3.7	3.6	97	0.1	3
New Mexico	309.2	309.1	100.0	4.4	4.4	100	0.0	0
Utah[a]	373.3	369.4	98.9	6.7	6.2	93	0.5	7
Wyoming	115.8	115.6	99.9	2.5	2.4	96	0.1	4
Pacific	7,995.5	7,465.4	93.4	112.3	100.5	89	11.8	11
Alaska	47.7	47.1	98.6	b	b	b	b	b
California	7,312.0	6,832.9	93.4	96.5	95.4	99	1.1	1
Hawaii	29.0	0.0	0.0	b	b	b	b	b
Oregon	264.2	243.0	92.0	8.5	2.4	28	6.1	72
Washington	342.6	342.4	99.9	7.3	2.7	37	4.6	63

[a] Data not strictly comparable to 1981 due to a change in reporting.

[b] Insufficient data.

Approximately 80%, or 196,180 conversions, were from three of the nine census divisions of the country -- the Middle Atlantic, South Atlantic and East North Central divisions.

The respondents were asked to provide a breakdown of the converted units by fuel type (see Table 5). The utilities providing data in this category represented 74% of total 1982 conversions. Based on these data, 213,330 units, or 87%, were conversions from fuel oil to gas. Propane followed with 14,889 units (6%) while electricity and other (e.g., coal, wood, etc.) accounted for 11,534 (5%) and 5,076 units (2%), respectively. Regionally, 99% of all conversions in New England were from fuel oil to gas, with the level at 96% in the Middle Atlantic division and 94% in the South Atlantic division. The conversion trend from electric to gas heating in the Pacific Northwest, which had been expected to continue as electricity prices rose rapidly relative to gas in this part of the U.S., slowed. However, conversions from electricity rose in the Mountain division to 68% of all conversions in the region in 1982 from 13% in 1981.

As part of the survey, respondents were asked to project additions to the househeating inventory from both new construction and conversions for 1983 (see Table 6). The results indicate that utilities expect to add approximately 179,000 conversions, a level that is lower than the past few years -- but comparable to the levels which prevailed during the 1970s. The projections for gas househeating additions from newly constructed units are up slightly from 1982 to 421,800 units. This means that new housing would account for 70% of total anticipated househeating additions.

New Hook-up Requirements

The status of new hook-up requirements in 1982 has not changed much from 1981. In all, 31 utilities reported some kind of restriction or requirement on hooking-up new customers in 1982. Five gas companies reported temporary moratoria on new customer hook-ups, primarily to assess pipeline capacity for meeting peak day demand. Nearly half of the reported restrictions, 15, were conservation-oriented requirements such as minimum insulation or structural standards set by state authorities for new customers.

Of the 31 companies reporting some form of restriction or requirement, 13 were in the North Central region (most conservation-oriented requirements were in this region), while the Northeast and South regions followed with 10 and 8, respectively. There were no reported restrictions in the West region.

Heating Appliance Data

There was an overall decline in manufacturers' shipments of total residential heating equipment of 16% (see Table 7) reflecting in part, the decrease in housing completions, starts and conversions. Shipments of gas warm air furnaces declined in 1982, down 18%, compared to a 2% decline in 1981. Gas boiler shipments were off 9% in 1982. Gas wall and floor furnace shipments, however, rose 4% and 78%, respectively.

Table 5

HOUSEHEATING CONVERSIONS TO NATURAL GAS IN 1982 BY TYPE OF FUEL

Region	Oil		Propane		Electricity		Other		Total
	Units	%	Units	%	Units	%	Units	%	
United States	213,330	87	14,889	6	11,534	5	5,076	2	244,829
New England	17,792	99	76	b	106	1	70	b	18,044
Middle Atlantic	80,083	96	369	b	1,250	1	2,054	2	83,756
East North Central	43,523	76	8,725	15	2,918	5	2,451	4	57,617
West North Central	9,234	78	2,227	19	389	3	-	b	11,850
South Atlantic	51,751	94	1,089	2	1,870	4	97	b	54,807
East South Central	928	28	1,263	38	1,132	34	31	b	3,354
West South Central	-	b	635	43	856	57	-	b	1,491
Mountain	177	9	229	11	1,410	68	255	12	2,071
Pacific	9,842	83	276	2	1,603	14	118	1	11,839

[a] "Other" includes conversions from coal, wood, etc.

[b] Less than 1%.

Table 6

1981
ANTICIPATED ADDITIONS
OF GAS HOUSEHEATING UNITS

(Thousands)

Region, Division, and State	Total (100%)	New Housing Number	New Housing (%)	Conversions Number	Conversions (%)
UNITED STATES	600.7	421.8	70	178.9	30
NORTHEAST	117.3	37.9	32	79.4	68
New England	27.4	10.3	38	17.1	62
Connecticut	12.8	4.5	35	8.3	65
Maine	1.7	0.2	12	1.5	88
Massachusetts	10.8	4.5	42	6.3	58
New Hampshire	1.6	0.9	56	0.7	44
Rhode Island	0.2	0.1	50	0.1	50
Vermont	0.3	0.1	33	0.2	67
Middle Atlantic	89.9	27.6	31	62.3	69
New Jersey	31.6	10.7	34	20.9	66
New York	36.3	7.6	21	28.7	79
Pennsylvania	22.0	9.3	42	12.7	58
NORTH CENTRAL	123.4	68.6	56	54.8	44
East North Central	109.8	58.9	54	50.9	46
Illinois	35.4	17.2	49	18.2	51
Indiana	19.8	8.7	44	11.1	56
Michigan	23.3	15.6	67	7.7	33
Ohio	17.4	13.5	78	3.9	22
Wisconsin	13.9	3.9	28	10.0	72
West North Central	13.6	9.7	71	3.9	29
Iowa	2.1	1.9	90	0.2	10
Kansas	2.5	2.5	100	b	b
Minnesota	b	b	b	b	b
Missouri	9.0	5.3	59	3.7	41
Nebraska	b	b	b	b	b
North Dakota	b	b	b	b	b
South Dakota	b	b	b	b	b
SOUTH	178.1	149.3	84	28.8	16
South Atlantic	83.5	59.4	71	24.1	29
Delaware	1.1	b	b	1.1	100
Dist. of Columbia	1.5	0.5	33	1.0	67
Florida	12.8	10.8	84	2.0	16
Georgia	32.3	31.4	97	0.9	3
Maryland	8.3	5.0	60	3.3	40
North Carolina	13.3	3.4	26	9.9	74
South Carolina	b	b	b	b	b
Virginia	12.4	6.8	55	5.6	45
West Virginia	1.8	1.5	83	0.3	17
East South Central	16.3	13.2	81	3.1	19
Alabama	5.6	4.5	80	1.1	20
Kentucky	3.6	2.4	67	1.2	33
Mississippi	2.7	2.3	85	0.4	15
Tennessee	4.4	4.0	91	0.4	9
West South Central	78.3	76.7	98	1.6	2
Arkansas	b	b	b	b	b
Louisiana	b	b	b	b	b
Oklahoma	26.1	25.9	99	0.2	1
Texas	52.2	50.8	97	1.4	3
WEST	181.9	166.0	91	15.9	9
Mountain	49.3	46.1	93	3.2	7
Arizona	3.2	3.2	100	b	b
Colorado	24.1	24.1	100	b	b
Idaho	3.3	1.0	29	2.3	71
Montana	b	b	b	b	b
Nevada	4.4	4.2	95	0.2	5
New Mexico	5.1	5.1	100	0.0	0
Utah	6.4	5.8	91	0.6	9
Wyoming	2.8	2.7	96	0.1	4
Pacific	132.6	119.9	90	12.7	10
Alaska	b	b	b	b	b
California	112.6	112.6	100	b	b
Hawaii	b	b	b	b	b
Oregon	8.4	2.5	30	5.9	70
Washington	11. 6	4.8	41	5.8	59

[b] Insufficient data.

Table 7

MANUFACTURERS' SHIPMENTS OF
RESIDENTIAL HEATING EQUIPMENT, 1978-1982

Category	1978	1979	1980	1981	1982	Percentage Change from 1981
Central Heating Equipment						
Warm Air Furnaces						
Gas[a]	1,636,100	1,862,600	1,445,700	1,416,700	1,155,600	- 18
Oil	263,000	157,800	63,700	81,200	103,500	+ 27
Electricity	349,300	283,200	227,400	234,500	177,100	- 24
Boilers						
Gas[a]	125,900	221,300	293,300	161,600	147,600	- 9
Oil	108,046	85,059	51,672	67,492	72,822	+ 8
Electric Heat Pumps	560,075	547,694	422,829	504,786	383,515	- 24
Other Gas Heating Equipment						
Wall Furnaces	199,190	207,000	199,390	127,160	132,640	+ 4
Floor Furnaces	18,070	15,560	12,240	10,552	18,811	+ 78
Total Residential Equipment	3,259,681	3,380,313	2,716,231	2,603,990	2,191,588	- 16

[a] Data not expanded.

Source: Gas Appliance Manufacturers Association, Statistical Highlights, March 9, 1983.
Heat pump data obtained from the Air Conditioning and Refrigeration Institute.

Electric warm air furnace shipments decreased by 24% in 1982, while heat pump shipments also decreased 24%. Shipments of oil warm air furnaces increased 27% in 1982, while oil boiler shipments increased 8%.

Gas Consumption Per Unit

Respondents to the survey were asked to estimate the average annual gas consumption for both single and multifamily dwellings. Utilities representing 80% of all gas househeating customers responded to this portion in the survey. These responses were then used to develop the U.S. and regional average estimates of per unit gas use. Both categories were weighted by the number of residential gas customers for each responding utility in each state. In addition, the multifamily data represented a weighted average of dwellings with 2-4 units, and dwellings with 5 or more units (see Table 8).

Due to changes in the reporting methods of some utilities, particularly in the definition of baseload and multifamily gas use and consumption per unit, consumption data from year to year are not always comparable. With this caveat in mind, a review of 1982 combined average consumption data (U.S. average weighted by customer and dwelling type) indicated that total per unit gas consumption was 110.1 Mcf for all units, while househeating was 76.5 Mcf and baseload consumption was 33.6 Mcf. In single family dwellings, gas consumption for househeating was 84.9 Mcf, while baseload consumption was 35.5 Mcf. By comparison the average multifamily dwelling unit consumed 55.1 and 28.8 Mcf, respectively, for househeating and baseload use.

Climatic conditions have the most significant impact on gas use for househeating purposes, but the size and thermal integrity of the structure must also be considered. Reflecting these factors, single family unit consumption was highest for househeating in the North Central region at 113.1 Mcf, and lowest in the West region at 57.6 Mcf. Gas consumption for househeating in multifamily dwellings followed a similar pattern with per unit consumption in the North Central region at 75.0 Mcf, with a low of 32.6 Mcf in the West region. Table 8 includes weather data for each region in the form of annual heating degree days for calendar year 1982 and the 30-year normal heating degree days. The degree day data are weighted by gas househeating customers. As is shown, 1982 was colder than normal.

Gas consumption for baseload use, which may include water heating, cooking, clothes drying and air conditioning, will vary with the size and type of appliance in the unit. Baseload consumption also has some seasonality reflecting lifestyle preferences under the various climatic conditions. For single family dwellings, baseload consumption was lowest in the West region at 29.9 Mcf, and highest in the Northeast region at 48.2 Mcf. Baseload consumption for multifamily dwellings ranged from 26.2 Mcf in the West to 43.9 Mcf in the Northeast.

Table 8

1982 AVERAGE ANNUAL GAS CONSUMPTION/UNIT[a]
BY REGION
(Mcf)

Region	Single Family	Multifamily[b]	Combined Average[c]	Heating Degree Days[d] 1982	Heating Degree Days[d] 30-year Normal
Northeast				5,757	5,698
Heating	106.5	67.5	90.3		
Baseload	48.2	43.9	46.4		
Total	154.7	111.4	136.7		
North Central				6,659	6,364
Heating	113.1	75.0	103.4		
Baseload	35.8	25.9	33.3		
Total	148.9	100.9	136.7		
South				3,085	3,144
Heating	65.4	47.4	61.6		
Baseload	32.0	26.4	30.8		
Total	97.4	73.8	92.4		
West				2,852	2,746
Heating	57.6	32.6	50.2		
Baseload	29.9	26.2	28.8		
Total	87.5	58.8	79.0		
U.S. Average				4,587	4,487
Heating	84.9	55.1	76.5		
Baseload	35.5	28.8	33.6		
Total	120.4	83.9	110.1		

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[a] Results for 1982 are based on responses from 155 different markets.

[b] Weighted average of dwellings containing 2-4 units and dwellings containing 5 units or more.

[c] Weighted by customer and dwelling type.

[d] Calendar year heating degree days are weighted by gas househeating customers, unlike the degree day data maintained by the National Oceanic and Atmospheric Administration which are weighted by total population in each state (see Appendix 1 for detailed definitions). The 30-year normal are also weighted by gas househeating customers as opposed to total population.

Conservation

This year the survey requested information regarding the amount of conservation which occurred between the pre-embargo 1973 baseline period and 1982. Companies representing 82% of the gas house-heating customers in the United States indicated that conservation, measured as the total percentage decline in consumption per househeating customer not explained by the weather, has reduced consumption in the United States to an average of 21.1% below the pre-1973 level. Conservation percentages reported by each company were weighted by househeating customer data from each company to derive regional and national conservation estimates. The magnitude of conservation ranged from high of 27.9% below the pre-1973 level of consumption in the Mountain region to a low of 13.9% in the West North Central region (see Table 9).

Table 9

1982 AVERAGE CONSERVATION BY REGION
(Percent Decline from 1973 Baseline)

Region	Conservation[a] (%)
Northeast	18.0
New England	14.4
Middle Atlantic	18.7
North Central	20.5
East North Central	21.2
West North Central	13.9
South	20.3
South Atlantic	19.0
East South Central	16.5
West South Central	23.5
West	25.7
Mountain	27.9
Pacific	24.8
United States	21.1

[a] The total percent decline in consumption normalized for weather from the pre-embargo 1973 baseline. Results for 1982 are based on individual company responses from 119 different markets and are weighted by househeating customers.

APPENDIX 1

HOUSEHEATING DATA
1982 ACTUAL AND 1983 ANTICIPATED
BY COMPANY

This Appendix presents gas househeating data obtained from a survey of 162 companies on a regional, state and company-by-company basis. Column 1 of the Appendix shows reported residential and househeating customers (a gas customer is equal to a meter, while a househeating unit is the actual residence which uses gas for spaceheating). Column 2 provides average baseload and heating consumption per customer, and the number of heating degree days (A heating degree day is a measure of the coldness of the weather, based on the extent to which the daily mean temperature falls below a reference temperature, usually 65°F). Column 3 shows the gas heating market share, defined as the percentage of total dwelling units in the franchise areas that are served by gas for househeating.

The market share should not be confused with househeating saturation, which is the number of gas househeating customers as a percentage of the total number of gas customers on a given system. It should also be noted that reported market share figures, in particular, may be inconsistent in some cases due to different interpretations for an individual utility from year to year. This question was revised in 1981 so that data reported in subsequent years may remain consistent. Column 4 summarizes reported househeating unit additions for 1982 and <u>anticipated</u> for 1983, disaggregated into additions from new construction, conversions, losses and net additions. In some cases, a change in methodology may result in inconsistent annual data for an individual utility.

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
NEW ENGLAND									
CONNECTICUT									
SOUTHERN CONNECTICUT GAS CO.					1982	528	2,082	9	2,601
ALL RESIDENTIAL	123,397		27.0	26	1983	1,000	2,500	75	3,425
HOUSEHEATING ONLY	73,476	106.0							
HEATING DEGREE DAYS		5,624							
CONNECTICUT NATURAL GAS					1982	807	4,025	120	4,712
ALL RESIDENTIAL	114,518		39.5	41	1983	1,221	3,500	630	4,091
HOUSEHEATING ONLY	78,395	134.5							
HEATING DEGREE DAYS		6,194							
NORTHEAST UTILITIES					1982	1,342	3,099	50	4,391
ALL RESIDENTIAL	138,525		40.0	16	1983	2,300	2,310	210	4,400
HOUSEHEATING ONLY	82,563	110.0							
HEATING DEGREE DAYS		5,982							
NEW ENGLAND									
MASSACHUSETTS									
BOSTON GAS CO.					1982	370	2,510	NA	NA
ALL RESIDENTIAL	446,391		42.0	34	1983	900	2,600	NA	NA
HOUSEHEATING ONLY	221,018	112.0							
HEATING DEGREE DAYS		5,618							
COLONIAL GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	35,280		35.0	40	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	28,983	85.0							
HEATING DEGREE DAYS		6,405							
COMMONWEALTH GAS CO.					1982	800	1,300	0	2,100
ALL RESIDENTIAL	185,136		30.0	NA	1983	800	910	0	1,710
HOUSEHEATING ONLY	146,348	120.0							
HEATING DEGREE DAYS		6,654							
FALL RIVER GAS CO.					1982	85	181	10	256
ALL RESIDENTIAL	36,299		18.0	78	1983	100	105	20	185
HOUSEHEATING ONLY	30,169	110.0							
HEATING DEGREE DAYS		6,161							
LOWELL GAS CO.					1982	1,172	96	20	1,248
ALL RESIDENTIAL	46,000		40.0	51	1983	1,500	145	10	1,635
HOUSEHEATING ONLY	41,000	101.0							
HEATING DEGREE DAYS		6,136							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
NEW ENGLAND									
MASSACHUSETTS									
BERKSHIRE GAS CO.					1982	20	115	87	48
ALL RESIDENTIAL	23,495		30.0	NA	1983	90	485	82	493
HOUSEHEATING ONLY	14,798	130.0							
HEATING DEGREE DAYS		7,387							
BAY STATE GAS CO.					1982	400	1,260	10	1,650
ALL RESIDENTIAL	180,910		37.0	32	1983	450	1,295	10	1,735
HOUSEHEATING ONLY	123,038	120.0							
HEATING DEGREE DAYS		6,176							
ESSEX COUNTY GAS CO.					1982	200	500	250	450
ALL RESIDENTIAL	27,009		20.0	45	1983	250	150	175	225
HOUSEHEATING ONLY	19,461	115.0							
HEATING DEGREE DAYS		6,967							
NEW ENGLAND									
MAINE									
NORTHERN UTILITIES INC.					1982	250	1,388	NA	NA
ALL RESIDENTIAL	12,685		21.0	2	1983	200	NA	NA	NA
HOUSEHEATING ONLY	9,576	85.0							
HEATING DEGREE DAYS		8,151							
NEW ENGLAND									
NEW HAMPSHIRE									
CONCORD NATURAL GAS CORP.					1982	20	92	17	95
ALL RESIDENTIAL	5,388		52.0	74	1983	20	13	60	-27
HOUSEHEATING ONLY	3,657	160.0							
HEATING DEGREE DAYS		7,550							
GAS SERVICE, INC.					1982	265	58	0	323
ALL RESIDENTIAL	18,141		37.0	35	1983	475	174	0	649
HOUSEHEATING ONLY	16,625	165.0							
HEATING DEGREE DAYS		7,351							
MANCHESTER GAS CO.					1982	200	43	40	203
ALL RESIDENTIAL	14,295		37.0	31	1983	300	135	2	433
HOUSEHEATING ONLY	9,574	144.0							
HEATING DEGREE DAYS		7,060							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
NEW ENGLAND									
NEW HAMPSHIRE									
NORTHERN UTILITIES INC.					1982	100	413	NA	NA
ALL RESIDENTIAL	7,546		25.0	15	1983	100	400	NA	NA
HOUSEHEATING ONLY	6,792	80.0							
HEATING DEGREE DAYS		6,151							
NEW ENGLAND									
RHODE ISLAND									
VALLEY GAS CO.					1982	110	71	36	145
ALL RESIDENTIAL	43,755		40.0	70	1983	90	63	25	128
HOUSEHEATING ONLY	31,212	90.0							
HEATING DEGREE DAYS		5,821							
NEW ENGLAND									
VERMONT									
VERMONT GAS SYSTEMS					1982	193	182	90	285
ALL RESIDENTIAL	11,242		36.2	NA	1983	150	160	90	220
HOUSEHEATING ONLY	9,291	106.6							
HEATING DEGREE DAYS		7,489							
MIDDLE ATLANTIC									
NEW JERSEY									
SOUTH JERSEY GAS CO.					1982	1,507	2,091	0	3,598
ALL RESIDENTIAL	122,417		36.0	40	1983	1,500	1,840	6	3,334
HOUSEHEATING ONLY	94,134	76.7							
HEATING DEGREE DAYS		4,751							
NEW JERSEY NATURAL GAS CO.					1982	2,260	5,095	272	7,083
ALL RESIDENTIAL	218,822		45.6	40	1983	4,700	3,100	250	7,550
HOUSEHEATING ONLY	171,856	83.4							
HEATING DEGREE DAYS		5,344							
PUBLIC SERVICE ELEC. & GAS					1982	5,068	21,022	46	26,044
ALL RESIDENTIAL	1,187,333		35.0	55	1983	4,500	16,000	40	20,460
HOUSEHEATING ONLY	677,267	101.0							
HEATING DEGREE DAYS		4,820							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MIDDLE ATLANTIC									
NEW YORK									
BROOKLYN UNION GAS CO.					1982	1,883	22,265	1,260	22,888
ALL RESIDENTIAL	1,038,222		44.0	44	1983	2,000	16,300	1,250	17,050
HOUSEHEATING ONLY	318,842	110.0							
HEATING DEGREE DAYS		4,990							
CENTRAL HUDSON GAS & ELEC.					1982	200	1,000	NA	NA
ALL RESIDENTIAL	42,737		55.0	17	1983	200	700	NA	NA
HOUSEHEATING ONLY	27,022	71.0							
HEATING DEGREE DAYS		6,381							
NIAGARA MOHAWK POWER CORP.					1982	NA	2,900	500	NA
ALL RESIDENTIAL	398,765		39.0	34	1983	NA	2,300	550	NA
HOUSEHEATING ONLY	326,313	150.0							
HEATING DEGREE DAYS		7,088							
CONSOLIDATED EDISON CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	934,204		52.0	42	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	161,298	121.0							
HEATING DEGREE DAYS		4,691							
NATIONAL FUEL DISTRIBUTION					1982	853	1,151	1,025	979
ALL RESIDENTIAL	455,617		44.0	84	1983	1,243	1,205	1,128	1,320
HOUSEHEATING ONLY	435,093	104.0							
HEATING DEGREE DAYS		6,749							
LONG ISLAND LIGHTING CO.					1982	718	4,866	NA	NA
ALL RESIDENTIAL	366,292		20.9	21	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	174,451	134.8							
HEATING DEGREE DAYS		5,642							
NEW YORK STATE ELEC. & GAS					1982	NA	NA	NA	NA
ALL RESIDENTIAL	112,090		35.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	103,033	115.0							
HEATING DEGREE DAYS		6,864							
ROCHESTER GAS & ELECTRIC					1982	1,465	3,130	NA	NA
ALL RESIDENTIAL	213,764		34.4	NA	1983	1,500	1,000	NA	NA
HOUSEHEATING ONLY	183,527	105.2							
HEATING DEGREE DAYS		6,726							
ORANGE & ROCKLAND UTILITIES					1982	1,293	353	NA	NA
ALL RESIDENTIAL	81,987		45.0	56	1983	707	387	NA	NA
HOUSEHEATING ONLY	76,260	116.0							
HEATING DEGREE DAYS		6,007							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MIDDLE ATLANTIC									
NEW YORK									
COLUMBIA GAS OF NEW YORK					1982	114	39	116	37
ALL RESIDENTIAL	58,482		40.3	65	1983	134	46	NA	NA
HOUSEHEATING ONLY	52,638	107.2							
HEATING DEGREE DAYS		7,124							
ST. LAWRENCE GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	9,258		34.0	75	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	8,343	134.0							
HEATING DEGREE DAYS		8,174							
MIDDLE ATLANTIC									
PENNSYLVANIA									
EQUITABLE GAS CO.					1982	986	319	101	1,204
ALL RESIDENTIAL	228,066		41.0	NA	1983	1,100	100	500	700
HOUSEHEATING ONLY	222,204	106.0							
HEATING DEGREE DAYS		5,937							
NATIONAL FUEL DISTRIBUTION					1982	360	105	443	22
ALL RESIDENTIAL	184,387		41.0	76	1983	525	110	487	148
HOUSEHEATING ONLY	181,290	108.0							
HEATING DEGREE DAYS		6,415							
NORTH PENN GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	27,429		39.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	27,262	82.0							
HEATING DEGREE DAYS		6,796							
PEOPLES NATURAL GAS CO.					1982	1,406	452	751	1,107
ALL RESIDENTIAL	297,827		57.0	NA	1983	1,000	450	751	699
HOUSEHEATING ONLY	288,671	95.0							
HEATING DEGREE DAYS		5,794							
PHILADELPHIA ELECTRIC CO.					1982	1,710	4,260	100	5,870
ALL RESIDENTIAL	275,548		30.0	38	1983	1,950	2,970	100	4,820
HOUSEHEATING ONLY	198,910	110.0							
HEATING DEGREE DAYS		5,020							
PHILADELPHIA GAS WORKS					1982	1,850	1,557	1,000	2,407
ALL RESIDENTIAL	512,850		48.0	71	1983	1,700	1,700	1,000	2,400
HOUSEHEATING ONLY	385,901	113.0							
HEATING DEGREE DAYS		4,940							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MIDDLE ATLANTIC									
PENNSYLVANIA									
PIKE COUNTY LIGHT & POWER					1982	NA	2	NA	NA
ALL RESIDENTIAL	844		36.0	31	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	794	112.0							
HEATING DEGREE DAYS		6,007							
PENNSYLVANIA GAS & WATER CO.					1982	35	1,895	372	1,558
ALL RESIDENTIAL	112,816		34.0	47	1983	150	1,800	350	1,600
HOUSEHEATING ONLY	79,345	138.0							
HEATING DEGREE DAYS		6,188							
UGI CORP.					1982	719	3,769	NA	NA
ALL RESIDENTIAL	189,183		31.0	25	1983	860	4,156	NA	NA
HOUSEHEATING ONLY	112,828	88.1							
HEATING DEGREE DAYS		5,893							
COLUMBIA GAS OF PENNSYLVANIA					1982	1,333	620	587	1,366
ALL RESIDENTIAL	304,578		38.9	69	1983	1,457	678	NA	NA
HOUSEHEATING ONLY	284,137	101.1							
HEATING DEGREE DAYS		5,842							
EAST NORTH CENTRAL									
ILLINOIS									
CENTRAL ILLINOIS LIGHT CO.					1982	239	225	150	314
ALL RESIDENTIAL	169,013		30.1	77	1983	250	175	100	325
HOUSEHEATING ONLY	164,783	106.9							
HEATING DEGREE DAYS		5,981							
CENTRAL IL. PUBLIC SERVICE					1982	400	420	150	670
ALL RESIDENTIAL	140,111		25.0	80	1983	500	1,000	100	1,400
HOUSEHEATING ONLY	136,013	100.0							
HEATING DEGREE DAYS		5,762							
ILLINOIS POWER CO.					1982	862	1,534	1,889	507
ALL RESIDENTIAL	349,491		25.8	85	1983	1,323	2,353	NA	NA
HOUSEHEATING ONLY	337,011	97.8							
HEATING DEGREE DAYS		5,991							
IOWA-ILLINOIS GAS & ELECTRIC					1982	265	35	177	123
ALL RESIDENTIAL	59,182		19.8	85	1983	500	55	NA	NA
HOUSEHEATING ONLY	56,271	113.9							
HEATING DEGREE DAYS		6,510							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	YEAR	GAS-HTD HOUSING UNIT ADDITIONS NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
ILLINOIS									
NORTH SHORE GAS CO.					1982	385	761	100	1,046
ALL RESIDENTIAL	92,582		50.0	90	1983	500	550	200	850
HOUSEHEATING ONLY	85,680	159.0							
HEATING DEGREE DAYS		6,968							
PEOPLES GAS LIGHT & COKE					1982	1,900	7,900	4,800	5,000
ALL RESIDENTIAL	826,196		40.0	94	1983	2,000	5,500	3,500	4,000
HOUSEHEATING ONLY	562,838	154.0							
HEATING DEGREE DAYS		6,931							
NORTHERN ILLINOIS GAS CO.					1982	8,453	9,122	4,500	13,075
ALL RESIDENTIAL	1,320,260		35.0	86	1983	12,000	8,500	4,500	16,000
HOUSEHEATING ONLY	1,251,374	133.0							
HEATING DEGREE DAYS		6,473							
UNITED CITIES GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	13,190		26.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	12,762	70.0							
HEATING DEGREE DAYS		4,399							
EAST NORTH CENTRAL									
INDIANA									
LAWRENCEBURG GAS CO.					1982	10	40	NA	NA
ALL RESIDENTIAL	3,609		36.0	75	1983	10	40	NA	NA
HOUSEHEATING ONLY	3,551	84.0							
HEATING DEGREE DAYS		4,854							
CITIZENS GAS & COKE					1982	NA	NA	NA	NA
ALL RESIDENTIAL	195,544		48.0	78	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	182,913	107.0							
HEATING DEGREE DAYS		5,423							
HOOSIER GAS CORP.					1982	81	72	180	-27
ALL RESIDENTIAL	20,673		28.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	20,432	96.0							
HEATING DEGREE DAYS		4,667							
INDIANA GAS CO.					1982	300	5,700	2,648	3,352
ALL RESIDENTIAL	281,769		32.5	86	1983	550	6,000	2,600	3,950
HOUSEHEATING ONLY	275,711	99.4							
HEATING DEGREE DAYS		5,764							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
INDIANA									
NORTHERN IN. PUBLIC SERVICE					1982	3,000	3,000	1,735	4,265
ALL RESIDENTIAL	488,358		35.0	NA	1983	6,000	2,100	1,000	7,100
HOUSEHEATING ONLY	464,811	110.0							
HEATING DEGREE DAYS		6,817							
OHIO VALLEY GAS CORP.					1982	57	99	87	69
ALL RESIDENTIAL	21,699		26.0	97	1983	50	114	69	95
HOUSEHEATING ONLY	21,220	125.0							
HEATING DEGREE DAYS		5,470							
RICHMOND GAS CORP.					1982	24	30	14	40
ALL RESIDENTIAL	12,253		35.4	NA	1983	0	NA	NA	NA
HOUSEHEATING ONLY	11,025	106.6							
HEATING DEGREE DAYS		5,051							
SOUTHERN INDIANA GAS & ELEC.					1982	100	720	227	593
ALL RESIDENTIAL	58,188		32.0	75	1983	350	660	270	740
HOUSEHEATING ONLY	57,179	104.0							
HEATING DEGREE DAYS		4,394							
MIDWEST NATURAL GAS CORP.					1982	26	NA	94	NA
ALL RESIDENTIAL	7,030		44.0	98	1983	30	NA	90	NA
HOUSEHEATING ONLY	6,895	111.0							
HEATING DEGREE DAYS		NA							
EAST NORTH CENTRAL									
MICHIGAN									
BATTLE CREEK GAS CO.					1982	16	411	6	421
ALL RESIDENTIAL	28,791		38.8	92	1983	20	202	NA	NA
HOUSEHEATING ONLY	27,165	147.6							
HEATING DEGREE DAYS		6,515							
CONSUMERS POWER CO.					1982	5,216	3,549	NA	NA
ALL RESIDENTIAL	1,090,494		29.2	82	1983	9,500	3,500	NA	NA
HOUSEHEATING ONLY	1,062,292	127.9							
HEATING DEGREE DAYS		7,226							
SOUTHEASTERN MICHIGAN GAS					1982	415	155	15	555
ALL RESIDENTIAL	60,861		22.0	67	1983	618	110	NA	NA
HOUSEHEATING ONLY	60,012	113.0							
HEATING DEGREE DAYS		7,425							

DIVISION / STATE / COMPANY	CUSTOMERS (YEAR-END)	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
MICHIGAN									
LAKE SUPERIOR DISTRICT POWER					1982	NA	75	NA	NA
ALL RESIDENTIAL	3,703		36.0	47	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	3,631	140.0							
HEATING DEGREE DAYS		9,968							
MICHIGAN CONSOLIDATED GAS CO					1982	4,140	2,145	6,300	-15
ALL RESIDENTIAL	975,021		43.0	85	1983	4,170	1,950	6,000	120
HOUSEHEATING ONLY	931,927	126.0							
HEATING DEGREE DAYS		6,841							
MICHIGAN POWER CO.					1982	294	882	35	1,141
ALL RESIDENTIAL	62,767		27.8	68	1983	400	1,115	35	1,480
HOUSEHEATING ONLY	61,974	103.7							
HEATING DEGREE DAYS		6,573							
MICHIGAN GAS UTILITIES CO.,					1982	984	1,172	NA	NA
ALL RESIDENTIAL	97,365		35.0	NA	1983	800	800	NA	NA
HOUSEHEATING ONLY	94,911	96.0							
HEATING DEGREE DAYS		6,713							
WISCONSIN PUBLIC SERVICE					1982	NA	NA	NA	NA
ALL RESIDENTIAL	4,272		21.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	3,984	133.0							
HEATING DEGREE DAYS		7,845							
EAST NORTH CENTRAL									
OHIO									
CINCINNATI GAS & ELECTRIC					1982	550	750	300	1,000
ALL RESIDENTIAL	269,347		36.0	90	1983	500	580	200	880
HOUSEHEATING ONLY	249,796	92.0							
HEATING DEGREE DAYS		4,854							
DAYTON POWER & LIGHT CO.					1982	706	505	1,592	-381
ALL RESIDENTIAL	243,731		NA	68	1983	1,200	500	621	1,079
HOUSEHEATING ONLY	240,452	NA							
HEATING DEGREE DAYS		5,669							
EAST OHIO GAS CO.					1982	3,284	3,794	3,500	3,578
ALL RESIDENTIAL	928,528		41.0	99	1983	5,500	700	3,500	2,700
HOUSEHEATING ONLY	918,929	115.0							
HEATING DEGREE DAYS		5,940							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
OHIO									
NATIONAL GAS & OIL CORP.					1982	160	40	NA	NA
ALL RESIDENTIAL	14,632		20.0	97	1983	100	30	NA	NA
HOUSEHEATING ONLY	14,632	110.0							
HEATING DEGREE DAYS		6,215							
NATIONAL FUEL DISTRIBUTION					1982	11	4	14	1
ALL RESIDENTIAL	5,404		39.0	75	1983	16	4	15	5
HOUSEHEATING ONLY	5,315	112.0							
HEATING DEGREE DAYS		6,415							
OHIO GAS CO.					1982	75	77	20	132
ALL RESIDENTIAL	22,365		40.0	85	1983	100	115	44	171
HOUSEHEATING ONLY	21,908	135.0							
HEATING DEGREE DAYS		6,432							
RIVER GAS CO.					1982	189	16	231	-26
ALL RESIDENTIAL	17,139		26.4	96	1983	150	32	105	77
HOUSEHEATING ONLY	16,673	82.6							
HEATING DEGREE DAYS		4,842							
TOLEDO EDISON CO.					1982	0	7	0	7
ALL RESIDENTIAL	4,680		30.0	67	1983	2	8	0	10
HOUSEHEATING ONLY	4,524	106.0							
HEATING DEGREE DAYS		6,775							
WEST OHIO GAS CO.					1982	69	153	718	-496
ALL RESIDENTIAL	49,326		27.6	87	1983	90	200	121	169
HOUSEHEATING ONLY	48,027	93.8							
HEATING DEGREE DAYS		6,355							
COLUMBIA GAS OF OHIO					1982	5,238	1,586	6,877	-53
ALL RESIDENTIAL	979,341		35.9	77	1983	5,822	1,763	NA	NA
HOUSEHEATING ONLY	967,877	95.0							
HEATING DEGREE DAYS		5,908							
EAST NORTH CENTRAL									
WISCONSIN									
LAKE SUPERIOR DISTRICT POWER					1982	NA	67	NA	NA
ALL RESIDENTIAL	5,928		28.0	22	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	5,780	109.0							
HEATING DEGREE DAYS		9,373							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
WISCONSIN									
MADISON GAS & ELECTRIC					1982	266	594	0	860
ALL RESIDENTIAL	60,738		31.8	70	1983	500	1,400	0	1,900
HOUSEHEATING ONLY	54,269	93.6							
HEATING DEGREE DAYS		7,894							
WISCONSIN GAS CO.					1982	1,015	3,477	901	3,591
ALL RESIDENTIAL	379,315		36.0	78	1983	1,150	2,786	25	3,911
HOUSEHEATING ONLY	326,301	101.0							
HEATING DEGREE DAYS		7,495							
NORTHERN STATES POWER CO.					1982	85	238	59	264
ALL RESIDENTIAL	28,022		24.0	23	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	23,605	82.0							
HEATING DEGREE DAYS		7,976							
SUPERIOR WATER,LIGHT & POWER					1982	18	40	0	58
ALL RESIDENTIAL	8,083		27.0	50	1983	15	40	10	45
HOUSEHEATING ONLY	5,573	158.4							
HEATING DEGREE DAYS		10,347							
WISCONSIN FUEL & LIGHT CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	34,236		29.4	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	32,246	96.7							
HEATING DEGREE DAYS		8,134							
WISCONSIN POWER & LIGHT CO.					1982	400	1,408	488	1,320
ALL RESIDENTIAL	89,205		31.7	80	1983	412	1,150	500	1,062
HOUSEHEATING ONLY	81,888	86.4							
HEATING DEGREE DAYS		7,898							
WISCONSIN PUBLIC SERVICE					1982	NA	NA	NA	NA
ALL RESIDENTIAL	135,649		29.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	126,130	128.0							
HEATING DEGREE DAYS		8,093							
WEST NORTH CENTRAL									
IOWA									
IOWA ELECTRIC LIGHT & POWER					1982	NA	686	NA	NA
ALL RESIDENTIAL	113,765		30.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	110,893	99.0							
HEATING DEGREE DAYS		7,181							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEAT-ING	BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CON-VER-SIONS	LESS LOSSES	NET ADDI-TIONS
WEST NORTH CENTRAL									
IOWA									
IOWA-ILLINOIS GAS & ELECTRIC					1982	593	60	131	522
ALL RESIDENTIAL	146,344		21.5	85	1983	NA	60	NA	NA
HOUSEHEATING ONLY	139,779	104.4							
HEATING DEGREE DAYS		6,510							
IOWA POWER & LIGHT CO.					1982	711	NA	NA	NA
ALL RESIDENTIAL	119,190		37.0	90	1983	658	NA	NA	NA
HOUSEHEATING ONLY	115,984	81.0							
HEATING DEGREE DAYS		6,696							
IOWA PUBLIC SERVICE CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	97,812		NA	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	92,726	NA							
HEATING DEGREE DAYS		7,498							
NORTH CENTRAL PUBLIC SERVICE					1982	85	43	60	68
ALL RESIDENTIAL	11,254		25.0	87	1983	90	37	50	77
HOUSEHEATING ONLY	11,138	100.0							
HEATING DEGREE DAYS		6,422							
WEST NORTH CENTRAL									
KANSAS									
ARKANSAS LOUISIANA GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	17,571		33.1	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	17,571	68.9							
HEATING DEGREE DAYS		5,075							
MIDWEST ENERGY, INC.					1982	396	NA	NA	NA
ALL RESIDENTIAL	8,862		30.8	90	1983	308	NA	NA	NA
HOUSEHEATING ONLY	8,862	101.2							
HEATING DEGREE DAYS		5,615							
KN ENERGY, INC.					1982	200	NA	NA	NA
ALL RESIDENTIAL	23,334		54.0	95	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	22,200	142.0							
HEATING DEGREE DAYS		6,517							
KANSAS POWER & LIGHT CO.					1982	999	90	330	759
ALL RESIDENTIAL	117,538		31.0	90	1983	1,652	100	700	1,052
HOUSEHEATING ONLY	114,012	72.0							
HEATING DEGREE DAYS		5,712							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
MINNESOTA									
CITY OF DULUTH					1982	27	386	12	401
ALL RESIDENTIAL	19,492		50.0	65	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	11,971	140.0							
HEATING DEGREE DAYS		10,254							
MONTANA-DAKOTA UTILITIES CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	1,573		23.7	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	1,034	101.9							
HEATING DEGREE DAYS		10,246							
NORTHERN STATES POWER CO.					1982	2,143	1,755	150	3,726
ALL RESIDENTIAL	209,187		33.0	88	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	191,569	110.0							
HEATING DEGREE DAYS		8,086							
NORTH CENTRAL PUBLIC SERVICE					1982	1,350	600	0	1,950
ALL RESIDENTIAL	41,076		23.0	75	1983	1,400	650	0	2,050
HOUSEHEATING ONLY	40,769	100.0							
HEATING DEGREE DAYS		8,086							
WEST NORTH CENTRAL									
MISSOURI									
MISSOURI PUBLIC SERVICE CO.					1982	140	105	625	-375
ALL RESIDENTIAL	35,459		NA	NA	1983	200	460	530	130
HOUSEHEATING ONLY	35,246	NA							
HEATING DEGREE DAYS		5,897							
MISSOURI UTILITIES CO.					1982	50	86	135	1
ALL RESIDENTIAL	43,657		25.0	80	1983	100	155	20	235
HOUSEHEATING ONLY	43,127	92.0							
HEATING DEGREE DAYS		4,628							
CITY OF SPRINGFIELD					1982	NA	NA	NA	NA
ALL RESIDENTIAL	48,634		33.0	90	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	48,634	74.0							
HEATING DEGREE DAYS		4,537							
LACLEDE GAS CO.					1982	3,800	700	4,500	0
ALL RESIDENTIAL	517,901		46.8	80	1983	3,000	1,300	4,500	-200
HOUSEHEATING ONLY	498,548	78.5							
HEATING DEGREE DAYS		4,952							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
NEBRASKA									
HASTINGS UTILITIES					1982	23	0	11	12
ALL RESIDENTIAL	7,885		NA	47	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	7,504	124.0							
HEATING DEGREE DAYS		5,701							
IOWA PUBLIC SERVICE CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	3,341		NA	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY.	3,341	NA							
HEATING DEGREE DAYS		7,498							
KN ENERGY, INC.					1982	500	60	NA	NA
ALL RESIDENTIAL	86,950		56.0	95	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	82,600	128.0							
HEATING DEGREE DAYS		6,983							
METROPOLITAN UTILITIES					1982	863	46	2	907
ALL RESIDENTIAL	119,812		42.1	93	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	116,043	103.6							
HEATING DEGREE DAYS		6,791							
NORTHWESTERN PUBLIC SERVICE					1982	147	63	37	173
ALL RESIDENTIAL	32,500		24.0	98	1983	180	18	34	164
HOUSEHEATING ONLY	32,369	88.0							
HEATING DEGREE DAYS		7,154							
WEST NORTH CENTRAL									
NORTH DAKOTA									
MONTANA-DAKOTA UTILITIES CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	62,529		33.8	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	61,904	110.7							
HEATING DEGREE DAYS		9,914							
NORTHERN STATES POWER CO.					1982	28	74	71	31
ALL RESIDENTIAL	17,895		26.0	63	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	13,764	110.0							
HEATING DEGREE DAYS		9,963							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
SOUTH DAKOTA									
IOWA PUBLIC SERVICE CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	7,239		NA	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	7,205	NA							
HEATING DEGREE DAYS		7,498							
MONTANA-DAKOTA UTILITIES CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	25,161		35.6	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	24,909	77.6							
HEATING DEGREE DAYS		8,005							
NORTHWESTERN PUBLIC SERVICE					1982	35	155	85	105
ALL RESIDENTIAL	24,838		22.0	75	1983	60	108	81	87
HOUSEHEATING ONLY	23,661	121.0							
HEATING DEGREE DAYS		8,128							
SOUTH ATLANTIC									
DISTRICT OF COLUMBIA									
WASHINGTON GAS LIGHT CO.					1982	500	7,000	500	7,000
ALL RESIDENTIAL	132,629		34.1	72	1983	500	1,000	450	1,050
HOUSEHEATING ONLY	95,906	93.0							
HEATING DEGREE DAYS		4,018							
SOUTH ATLANTIC									
DELAWARE									
DELMARVA POWER & LIGHT CO.					1982	440	1,000	40	1,400
ALL RESIDENTIAL	70,356		31.1	33	1983	NA	1,000	40	NA
HOUSEHEATING ONLY	46,870	83.8							
HEATING DEGREE DAYS		5,088							
SOUTH ATLANTIC									
FLORIDA									
PEOPLES GAS SYSTEM, INC.					1982	2,100	440	1,910	630
ALL RESIDENTIAL	151,645		18.0	77	1983	3,000	560	2,110	1,450
HOUSEHEATING ONLY	112,130	190.0							
HEATING DEGREE DAYS		137							

DIVISION / STATE / COMPANY	CUSTOMERS	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR)		GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS			
	YEAR-END	HEATING	BASE-LOAD		YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
GEORGIA									
ATLANTA GAS LIGHT CO.					1982	23,440	801	0	24,241
ALL RESIDENTIAL	808,443		53.4	97	1983	25,549	683	20	26,212
HOUSEHEATING ONLY	784,190	42.5							
HEATING DEGREE DAYS		2,944							
GAS LIGHT OF COLUMBUS					1982	488	59	340	207
ALL RESIDENTIAL	48,025		25.0	88	1983	700	35	350	385
HOUSEHEATING ONLY	48,025	43.0							
HEATING DEGREE DAYS		2,000							
UNITED CITIES GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	6,978		20.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	6,887	52.0							
HEATING DEGREE DAYS		2,755							
SOUTH ATLANTIC									
MARYLAND									
BALTIMORE GAS & ELECTRIC					1982	1,915	2,490	1,000	3,405
ALL RESIDENTIAL	476,213		42.9	44	1983	1,819	2,000	300	3,519
HOUSEHEATING ONLY	336,575	80.6							
HEATING DEGREE DAYS		4,741							
WASHINGTON GAS LIGHT CO.					1982	3,000	9,400	500	11,900
ALL RESIDENTIAL	214,132		33.0	71	1983	3,000	1,100	600	3,500
HOUSEHEATING ONLY	204,862	88.6							
HEATING DEGREE DAYS		4,018							
COLUMBIA GAS OF MARYLAND					1982	87	114	187	14
ALL RESIDENTIAL	26,413		31.0	38	1983	91	119	NA	NA
HOUSEHEATING ONLY	21,941	96.8							
HEATING DEGREE DAYS		5,842							
SOUTH ATLANTIC									
NORTH CAROLINA									
PIEDMONT NATURAL GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	137,889		24.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	137,889	74.0							
HEATING DEGREE DAYS		3,234							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
NORTH CAROLINA									
PUBLIC SERVICE OF NC					1982	1,200	3,200	284	4,116
ALL RESIDENTIAL	138,288		24.6	29	1983	1,375	4,075	300	5,150
HOUSEHEATING ONLY	125,038	96.4							
HEATING DEGREE DAYS		5,245							
CITY OF WILSON					1982	150	43	3	190
ALL RESIDENTIAL	5,774		3.6	27	1983	50	30	3	77
HOUSEHEATING ONLY	5,307	6.6							
HEATING DEGREE DAYS		NA							
NORTH CAROLINA NATURAL GAS					1982	NA	NA	NA	NA
ALL RESIDENTIAL	74,385		16.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	70,848	65.0							
HEATING DEGREE DAYS		3,477							
SOUTH ATLANTIC									
SOUTH CAROLINA									
PIEDMONT NATURAL GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	43,360		21.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	43,360	76.0							
HEATING DEGREE DAYS		3,246							
COMMISSION OF PUBLIC WORKS					1982	60	55	11	104
ALL RESIDENTIAL	8,820		14.0	48	1983	70	90	10	150
HOUSEHEATING ONLY	6,174	55.0							
HEATING DEGREE DAYS		3,205							
SOUTH CAROLINA ELEC. & GAS					1982	NA	NA	NA	NA
ALL RESIDENTIAL	157,714		16.5	47	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	78,800	50.0							
HEATING DEGREE DAYS		2,220							
UNITED CITIES GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	3,378		23.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	3,055	50.0							
HEATING DEGREE DAYS		3,134							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEAT-ING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CON-VER-SIONS	LESS LOSSES	NET ADDI-TIONS
SOUTH ATLANTIC									
VIRGINIA									
CITY OF CHARLOTTESVILLE					1982	585	45	25	605
ALL RESIDENTIAL	11,161		36.0	50	1983	300	0	80	220
HOUSEHEATING ONLY	6,697	100.0							
HEATING DEGREE DAYS		3,994							
CITY OF DANVILLE					1982	20	100	20	100
ALL RESIDENTIAL	13,870		24.1	69	1983	100	120	20	200
HOUSEHEATING ONLY	12,130	87.6							
HEATING DEGREE DAYS		3,880							
CITY OF RICHMOND					1982	853	757	NA	NA
ALL RESIDENTIAL	64,907		25.4	NA	1983	600	750	NA	NA
HOUSEHEATING ONLY	48,196	73.7							
HEATING DEGREE DAYS		3,616							
ROANOKE GAS CO.					1982	125	301	65	361
ALL RESIDENTIAL	30,120		30.0	38	1983	300	160	75	385
HOUSEHEATING ONLY	27,938	110.0							
HEATING DEGREE DAYS		4,495							
UNITED CITIES GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	1,007		23.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	915	101.0							
HEATING DEGREE DAYS		4,060							
COLUMBIA GAS OF VIRGINIA					1982	184	107	157	134
ALL RESIDENTIAL	35,214		32.3	43	1983	212	123	NA	NA
HOUSEHEATING ONLY	34,227	84.0							
HEATING DEGREE DAYS		4,353							
WASHINGTON GAS LIGHT CO.					1982	2,500	14,600	400	16,700
ALL RESIDENTIAL	166,180		30.0	60	1983	3,000	2,600	500	5,100
HOUSEHEATING ONLY	153,865	82.0							
HEATING DEGREE DAYS		4,018							
SOUTH ATLANTIC									
WEST VIRGINIA									
EQUITABLE GAS CO.					1982	60	NA	NA	NA
ALL RESIDENTIAL	10,237		36.0	NA	1983	70	NA	NA	NA
HOUSEHEATING ONLY	9,900	86.0							
HEATING DEGREE DAYS		NA							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
WEST VIRGINIA									
HOPE NATURAL GAS CO.					1982	244	56	NA	NA
ALL RESIDENTIAL	102,685		58.0	NA	1983	265	50	NA	NA
HOUSEHEATING ONLY	99,604	84.6							
HEATING DEGREE DAYS		4,849							
COLUMBIA GAS OF WV					1982	1,095	202	3,145	-1,848
ALL RESIDENTIAL	189,169		31.1	72	1983	1,169	217	NA	NA
HOUSEHEATING ONLY	187,248	88.5							
HEATING DEGREE DAYS		4,732							
EAST SOUTH CENTRAL									
ALABAMA									
ALABAMA GAS CORP.					1982	1,852	603	2,029	426
ALL RESIDENTIAL	349,798		31.0	70	1983	2,500	550	2,150	900
HOUSEHEATING ONLY	338,801	60.0							
HEATING DEGREE DAYS		2,808							
MOBILE GAS SERVICE CORP.					1982	519	347	755	111
ALL RESIDENTIAL	82,293		27.5	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	81,552	31.8							
HEATING DEGREE DAYS		1,566							
CITY OF HUNTSVILLE					1982	158	78	83	153
ALL RESIDENTIAL	23,817		28.8	51	1983	200	110	83	227
HOUSEHEATING ONLY	23,775	70.3							
HEATING DEGREE DAYS		3,067							
DECATUR UTILITIES					1982	120	NA	NA	NA
ALL RESIDENTIAL	4,051		11.0	35	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	4,025	53.0							
HEATING DEGREE DAYS		2,989							
CITY OF FLORENCE					1982	NA	NA	NA	NA
ALL RESIDENTIAL	7,124		NA	50	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	6,017	NA							
HEATING DEGREE DAYS		415							
CITY OF FULTONDALE					1982	0	NA	111	NA
ALL RESIDENTIAL	5,989		10.2	95	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	5,693	43.4							
HEATING DEGREE DAYS		NA							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST SOUTH CENTRAL									
ALABAMA									
SOUTHEAST ALABAMA GAS					1982	NA	NA	NA	NA
ALL RESIDENTIAL	30,362		33.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	30,362	63.0							
HEATING DEGREE DAYS		1,726							
EAST SOUTH CENTRAL									
KENTUCKY									
COLUMBIA GAS OF KENTUCKY					1982	417	93	1,096	-586
ALL RESIDENTIAL	102,432		30.3	68	1983	466	104	NA	NA
HOUSEHEATING ONLY	100,651	85.3							
HEATING DEGREE DAYS		4,502							
UNION LIGHT,HEAT & POWER					1982	50	130	100	80
ALL RESIDENTIAL	55,748		36.0	90	1983	75	115	100	90
HOUSEHEATING ONLY	52,941	98.0							
HEATING DEGREE DAYS		4,854							
EQUITABLE GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	4,400		NA	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	4,200	NA							
HEATING DEGREE DAYS		NA							
LOUISVILLE GAS & ELECTRIC					1982	600	670	970	300
ALL RESIDENTIAL	214,778		36.0	NA	1983	650	750	1,000	400
HOUSEHEATING ONLY	197,000	85.0							
HEATING DEGREE DAYS		4,356							
WESTERN KENTUCKY GAS CO.					1982	525	85	120	430
ALL RESIDENTIAL	123,719		31.0	40	1983	780	52	NA	NA
HOUSEHEATING ONLY	111,347	80.0							
HEATING DEGREE DAYS		4,478							
DELTA NATURAL GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	25,150		30.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	24,647	80.0							
HEATING DEGREE DAYS		4,456							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST SOUTH CENTRAL									
MISSISSIPPI									
ENTEX, INC.					1982	710	230	20	920
ALL RESIDENTIAL	96,410		32.0	82	1983	680	180	20	840
HOUSEHEATING ONLY	91,590	54.0							
HEATING DEGREE DAYS		2,249							
MISSISSIPPI VALLEY GAS CO.					1982	1,400	180	337	1,245
ALL RESIDENTIAL	194,501		31.2	94	1983	1,600	185	520	1,265
HOUSEHEATING ONLY	194,501	64.9							
HEATING DEGREE DAYS		2,755							
EAST SOUTH CENTRAL									
TENNESSEE									
MEMPHIS LIGHT,GAS & WATER					1982	1,947	14	19	1,942
ALL RESIDENTIAL	215,428		30.0	82	1983	2,000	14	19	1,995
HOUSEHEATING ONLY	207,673	87.0							
HEATING DEGREE DAYS		3,105							
NASHVILLE GAS CO.					1982	241	315	726	-170
ALL RESIDENTIAL	54,564		30.0	26	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	52,733	90.0							
HEATING DEGREE DAYS		3,570							
UNITED CITIES GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	23,629		26.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	23,026	68.0							
HEATING DEGREE DAYS		3,570							
MIDDLE TENNESSEE NATURAL GAS					1982	20	595	50	385
ALL RESIDENTIAL	8,453		18.0	40	1983	40	175	55	160
HOUSEHEATING ONLY	8,030	74.0							
HEATING DEGREE DAYS		3,570							
JACKSON UTILITY DIVISION					1982	100	24	108	16
ALL RESIDENTIAL	14,604		23.0	75	1983	80	30	42	68
HOUSEHEATING ONLY	14,335	69.0							
HEATING DEGREE DAYS		3,516							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CON-VERSIONS	LESS LOSSES	NET ADDITIONS
WEST SOUTH CENTRAL									
ARKANSAS									
ARKANSAS LOUISIANA GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	338,060		31.5	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	338,060	65.5							
HEATING DEGREE DAYS		3,066							
ARKANSAS WESTERN GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	63,208		36.6	98	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	61,944	65.1							
HEATING DEGREE DAYS		4,703							
ARKANSAS OKLAHOMA GAS CORP.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	32,147		34.8	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	32,147	74.4							
HEATING DEGREE DAYS		3,571							
WEST SOUTH CENTRAL									
LOUISIANA									
ARKANSAS LOUISIANA GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	130,069		28.3	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	130,069	58.7							
HEATING DEGREE DAYS		2,351							
TRANS LOUISIANA GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	63,151		30.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	63,151	41.0							
HEATING DEGREE DAYS		1,899							
NEW ORLEANS PUBLIC SERVICE					1982	NA	NA	NA	NA
ALL RESIDENTIAL	162,381		NA	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	162,381	NA							
HEATING DEGREE DAYS		951							
ENTEX, INC.					1982	640	50	40	650
ALL RESIDENTIAL	125,288		31.0	80	1983	750	70	40	780
HOUSEHEATING ONLY	119,025	43.0							
HEATING DEGREE DAYS		1,557							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST SOUTH CENTRAL									
OKLAHOMA									
ARKANSAS LOUISIANA GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	107,431		29.9	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	107,431	62.1							
HEATING DEGREE DAYS		3,518							
ARKANSAS OKLAHOMA GAS CORP.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	13,151		31.1	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	13,151	62.5							
HEATING DEGREE DAYS		3,571							
LONE STAR GAS CO.					1982	300	19	60	259
ALL RESIDENTIAL	34,335		30.0	45	1983	308	19	70	257
HOUSEHEATING ONLY	28,155	63.0							
HEATING DEGREE DAYS		2,565							
OKLAHOMA NATURAL GAS CO.					1982	16,030	90	90	16,030
ALL RESIDENTIAL	576,300		32.0	90	1983	20,000	150	100	20,050
HOUSEHEATING ONLY	562,480	73.0							
HEATING DEGREE DAYS		3,622							
WEST SOUTH CENTRAL									
TEXAS									
ARKANSAS LOUISIANA GAS CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	53,988		25.3	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	53,988	52.7							
HEATING DEGREE DAYS		2,546							
CITY OF CORPUS CHRISTI					1982	438	0	67	371
ALL RESIDENTIAL	52,646		25.0	NA	1983	500	0	NA	NA
HOUSEHEATING ONLY	52,646	23.6							
HEATING DEGREE DAYS		1,093							
LONE STAR GAS CO.					1982	7,000	420	3,310	4,110
ALL RESIDENTIAL	1,047,958		21.0	45	1983	7,176	420	3,410	4,186
HOUSEHEATING ONLY	859,326	63.0							
HEATING DEGREE DAYS		2,565							
ENTEX, INC.					1982	21,200	500	100	21,600
ALL RESIDENTIAL	910,837		29.0	80	1983	21,800	500	100	22,200
HOUSEHEATING ONLY	892,620	37.0							
HEATING DEGREE DAYS		1,308							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST SOUTH CENTRAL									
TEXAS									
ENERGAS CO.					1982	7,822	50	192	7,680
ALL RESIDENTIAL	247,863		46.0	90	1983	7,000	60	220	6,840
HOUSEHEATING ONLY	235,400	54.0							
HEATING DEGREE DAYS		3,503							
MOUNTAIN									
ARIZONA									
ARIZONA PUBLIC SERVICE CO.					1982	0	0	1,118	-1,118
ALL RESIDENTIAL	314,367		14.0	53	1983	0	0	3,682	-3,682
HOUSEHEATING ONLY	290,234	56.0							
HEATING DEGREE DAYS		990							
SOUTHWEST GAS CORP.					1982	2,128	15	20	2,123
ALL RESIDENTIAL	155,804		18.0	89	1983	2,701	14	14	2,701
HOUSEHEATING ONLY	155,447	36.0							
HEATING DEGREE DAYS		1,625							
MOUNTAIN									
COLORADO									
CITY OF COLORADO SPRINGS					1982	2,957	NA	97	NA
ALL RESIDENTIAL	77,807		32.0	100	1983	3,053	NA	NA	NA
HOUSEHEATING ONLY	77,807	73.8							
HEATING DEGREE DAYS		6,745							
KN ENERGY, INC.					1982	50	0	0	50
ALL RESIDENTIAL	5,438		59.0	95	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	5,170	124.0			1984	NA	NA	NA	NA
HEATING DEGREE DAYS		6,182			1985	NA	NA	NA	NA
PUBLIC SERVICE OF COLORADO					1982	15,399	NA	NA	NA
ALL RESIDENTIAL	624,876		38.9	73	1983	17,868	NA	NA	NA
HOUSEHEATING ONLY	624,876	103.3							
HEATING DEGREE DAYS		6,207							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MOUNTAIN									
IDAHO									
WASHINGTON WATER POWER CO.					1982	97	123	200	20
ALL RESIDENTIAL	14,598		13.5	22	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	12,516	70.9							
HEATING DEGREE DAYS		6,999							
INTERMOUNTAIN GAS CO.					1982	631	1,195	1,228	598
ALL RESIDENTIAL	85,425		17.3	38	1983	904	2,052	NA	NA
HOUSEHEATING ONLY	85,425	55.0							
HEATING DEGREE DAYS		6,158							
MOUNTAIN									
MONTANA									
MONTANA-DAKOTA UTILITIES CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	54,349		34.9	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	53,805	98.5							
HEATING DEGREE DAYS		8,100							
MONTANA POWER CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	89,752		44.0	70	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	89,752	86.0							
HEATING DEGREE DAYS		9,050							
MOUNTAIN									
NEW MEXICO									
GAS CO. OF NEW MEXICO					1982	4,435	NA	0	NA
ALL RESIDENTIAL	260,581		NA	91	1983	5,100	NA	0	NA
HOUSEHEATING ONLY	260,581	NA							
HEATING DEGREE DAYS		NA							
MOUNTAIN									
NEVADA									
SIERRA PACIFIC POWER CO.					1982	750	80	50	780
ALL RESIDENTIAL	48,656		23.9	67	1983	1,300	105	100	1,305
HOUSEHEATING ONLY	46,962	51.3							
HEATING DEGREE DAYS		6,354							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MOUNTAIN									
NEVADA									
SOUTHWEST GAS CORP.					1982	2,812	56	3	2,865
ALL RESIDENTIAL	117,237		28.0	55	1983	2,884	60	3	2,941
HOUSEHEATING ONLY	111,696	67.0							
HEATING DEGREE DAYS		4,456							
MOUNTAIN									
UTAH									
MOUNTAIN FUEL SUPPLY CO.					1982	6,166	533	955	5,744
ALL RESIDENTIAL	365,996		42.1	95	1983	5,804	590	1,000	5,394
HOUSEHEATING ONLY	365,996	79.5							
HEATING DEGREE DAYS		6,455							
MOUNTAIN									
WYOMING									
KN ENERGY, INC.					1982	50	0	NA	NA
ALL RESIDENTIAL	9,673		54.0	95	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	9,190	128.0							
HEATING DEGREE DAYS		7,808							
MONTANA-DAKOTA UTILITIES CO.					1982	NA	NA	NA	NA
ALL RESIDENTIAL	11,282		36.0	NA	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	11,169	99.1							
HEATING DEGREE DAYS		7,851							
MOUNTAIN FUEL SUPPLY CO.					1982	1,180	16	137	1,059
ALL RESIDENTIAL	18,750		40.7	95	1983	1,214	25	150	1,089
HOUSEHEATING ONLY	18,750	87.3							
HEATING DEGREE DAYS		6,455							
WYOMING GAS CO.					1982	NA	NA	5	NA
ALL RESIDENTIAL	5,344		36.0	98	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	5,344	91.0							
HEATING DEGREE DAYS		8,454							
NORTHERN GAS DIVISION					1982	200	24	90	134
ALL RESIDENTIAL	41,979		36.0	90	1983	200	20	90	130
HOUSEHEATING ONLY	41,979	114.0							
HEATING DEGREE DAYS		7,808							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
PACIFIC									
CALIFORNIA									
CITY OF LONG BEACH					1982	360	NA	133	NA
ALL RESIDENTIAL	116,036		28.0	95	1983	400	NA	150	NA
HOUSEHEATING ONLY	109,770	25.0							
HEATING DEGREE DAYS		1,137							
PACIFIC GAS AND ELECTRIC					1982	28,926	NA	12,113	NA
ALL RESIDENTIAL	2,734,566		13.0	90	1983	59,000	NA	NA	NA
HOUSEHEATING ONLY	2,686,813	65.0							
HEATING DEGREE DAYS		2,827							
SAN DIEGO GAS & ELECTRIC CO.					1982	5,395	0	0	5,395
ALL RESIDENTIAL	681,576		55.0	77	1983	10,944	0	0	10,944
HOUSEHEATING ONLY	523,495	38.0							
HEATING DEGREE DAYS		912							
SOUTHWEST GAS CORP.					1982	1,412	33	15	1,430
ALL RESIDENTIAL	44,368		25.0	74	1983	1,549	38	27	1,560
HOUSEHEATING ONLY	43,924	67.6							
HEATING DEGREE DAYS		5,923							
SOUTHERN CALIFORNIA GAS CO.					1982	59,309	1,077	19,239	41,147
ALL RESIDENTIAL	3,687,135		38.2	91	1983	60,712	NA	6,000	NA
HOUSEHEATING ONLY	3,412,075	41.8							
HEATING DEGREE DAYS		1,462							
PACIFIC									
OREGON									
NORTHWEST NATURAL GAS CO.					1982	2,010	5,164	4,868	2,306
ALL RESIDENTIAL	221,223		25.5	29	1983	2,125	4,925	3,890	3,160
HOUSEHEATING ONLY	205,480	54.1							
HEATING DEGREE DAYS		4,418							
PACIFIC									
WASHINGTON									
NORTHWEST NATURAL GAS CO.					1982	20	26	37	9
ALL RESIDENTIAL	5,337		25.5	13	1983	50	225	140	135
HOUSEHEATING ONLY	4,883	54.1							
HEATING DEGREE DAYS		4,418							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
PACIFIC									
WASHINGTON									
WASHINGTON WATER POWER CO.					1982	241	405	400	246
ALL RESIDENTIAL	51,949		13.2	34	1983	NA	NA	NA	NA
HOUSEHEATING ONLY	49,573	87.0							
HEATING DEGREE DAYS		6,999							
WASHINGTON NATURAL GAS CO.					1982	2,011	3,365	3,974	1,402
ALL RESIDENTIAL	228,925		16.3	30	1983	3,200	4,410	NA	NA
HOUSEHEATING ONLY	228,925	71.4							
HEATING DEGREE DAYS		4,952							

APPENDIX 2

COMPETITIVE FUEL PRICES
(as of December 31, 1982)

The information in this section presents the average delivered price (as of December 31, 1982) of competitive fuels distributed to residential customers, gas' principal competition in each market, and the average annual gas heating bill. The data reflect prices in the principal city served within each company's franchise area. Regional fuel prices for competitive fuels are listed at the end of each region. Prices are expressed in dollars per million Btu for comparison.

The prices for natural gas represent househeating use only and exclude baseload prices. Baseload consumption includes all domestic uses of gas (e.g., ranges, water heaters, and clothes dryers) except househeating and air conditioning. Moreover, baseload prices are generally higher than househeating prices because utilities charge more per unit of energy for small monthly consumption (baseload only) and less per unit of energy for large monthly consumption (baseload plus winter heating use).

The prices for electricity represent total electric use or the rate prevailing for 600 Kwh per month and above.

The following conversion factors were used to convert reported data to Btu.

Conversion Factors

Natural Gas	1,000 cubic feet/million Btu
Fuel Oil #2	7.194 gallons/million Btu
Electricity	293.083 kwh/million Btu
Propane	10.917 gallons/million Btu

Information marked "NA" represents data not available or fuel not distributed.

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
NEW ENGLAND							
CONNECTICUT							
SOUTHERN CONNECTICUT GAS CO.	BRIDGEPORT	8.92	7.70	26.64	16.05	#2 OIL	954.00
CONNECTICUT NATURAL GAS	HARTFORD	7.67	9.06	21.49	10.92	#2 OIL	921.00
NORTHEAST UTILITIES	WATERBURY	10.10	8.34	21.89	9.83	#2 OIL	946.00
NEW ENGLAND							
MASSACHUSETTS							
BOSTON GAS CO.	BOSTON	7.78	9.14	26.38	10.26	#2 OIL	787.77
COLONIAL GAS CO.	CAPE COD	8.68	8.99	23.45	10.37	ELECTRIC	700.00
COMMONWEALTH GAS CO.	WORCESTER	7.70	7.91	19.93	13.10	#2 OIL	1,200.00
FALL RIVER GAS CO.	FALL RIVER	7.00	8.63	23.45	NA	#2 OIL	770.00
LOWELL GAS CO.	LOWELL	8.30	6.40	26.38	10.04	#2 OIL	732.00
BERKSHIRE GAS CO.	PITTSFIELD	7.12	7.91	21.98	9.83	#2 OIL	900.00
BAY STATE GAS CO.	BROCKTON	7.17	8.35	28.96	11.14	#2 OIL	974.00
ESSEX COUNTY GAS CO.	HAVERHILL	8.30	13.67	19.05	10.59	#2 OIL	860.00
NEW ENGLAND							
MAINE							
NORTHERN UTILITIES INC.	LEWISTON	7.48	8.42	19.26	12.01	#2 OIL	830.00
NEW ENGLAND							
NEW HAMPSHIRE							
CONCORD NATURAL GAS CORP.	CONCORD	7.40	6.32	24.77	10.44	#2 OIL	1,184.00
GAS SERVICE, INC.	NASHUA	6.45	7.48	27.84	10.04	#2 OIL	900.00
MANCHESTER GAS CO.	MANCHESTER	7.60	7.53	26.96	10.15	#2 OIL	800.00
NORTHERN UTILITIES INC.	PORTSMOUTH	6.47	8.63	27.43	12.01	#2 OIL	695.00
NEW ENGLAND							
RHODE ISLAND							
VALLEY GAS CO.	PAWTUCKET	8.00	7.77	NA	9.61	#2 OIL	750.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
NEW ENGLAND							
VERMONT							
VERMONT GAS SYSTEMS	BURLINGTON	6.73	8.78	15.37	9.61	ELECTRIC	681.50
NEW ENGLAND DIVISION		7.95	8.39	23.60	10.94		912.20
MIDDLE ATLANTIC							
NEW JERSEY							
SOUTH JERSEY GAS CO.	ATLANTIC CITY	6.05	8.63	18.08	9.83	ELECTRIC	464.00
NEW JERSEY NATURAL GAS CO.	WALL	7.02	7.91	21.98	13.10	#2 OIL	832.00
PUBLIC SERVICE ELEC. & GAS	NEWARK	6.78	7.55	17.85	NA	#2 OIL	708.00
MIDDLE ATLANTIC							
NEW YORK							
BROOKLYN UNION GAS CO.	NEW YORK	7.74	9.09	27.77	NA	#2 OIL	863.00
CENTRAL HUDSON GAS & ELEC.	POUGHKEEPSIE	6.80	8.99	34.00	5.74	#2 OIL	490.00
NIAGARA MOHAWK POWER CORP.	SYRACUSE	6.53	8.56	19.34	9.83	ELECTRIC	693.00
CONSOLIDATED EDISON CO.	NEW YORK	7.37	9.09	37.25	NA	#2 OIL	750.00
NATIONAL FUEL DISTRIBUTION	BUFFALO	6.55	8.99	19.34	10.37	#2 OIL	553.80
LONG ISLAND LIGHTING CO.	LONG BEACH	6.54	9.14	25.94	10.92	#2 OIL	774.00
NEW YORK STATE ELEC. & GAS	ITHACA	5.48	8.63	15.24	9.83	#2 OIL	563.00
ROCHESTER GAS & ELECTRIC	ROCHESTER	6.42	9.20	18.87	10.26	ELECTRIC	676.00
ORANGE & ROCKLAND UTILITIES	CLARKSTOWN	5.82	8.63	37.95	6.44	#2 OIL	675.12
COLUMBIA GAS OF NEW YORK	BINGHAMTON	5.95	8.48	19.52	12.51	ELECTRIC	576.00
ST. LAWRENCE GAS CO.	MASSENA	6.46	8.88	17.35	16.20	ELECTRIC	812.00
MIDDLE ATLANTIC							
PENNSYLVANIA							
EQUITABLE GAS CO.	PITTSBURGH	5.64	8.35	15.89	11.24	ELECTRIC	514.00
NATIONAL FUEL DISTRIBUTION	ERIE	5.79	8.85	21.57	10.09	#2 OIL	516.14
NORTH PENN GAS CO.	RURAL	4.95	8.38	15.24	10.37	#2 OIL	600.86

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
PEOPLES NATURAL GAS CO.	PITTSBURGH	4.29	8.35	18.00	11.68	ELECTRIC	416.00
PHILADELPHIA ELECTRIC CO.	PHILADELPHIA	6.65	8.56	17.00	9.83	ELECTRIC	730.00
PHILADELPHIA GAS WORKS	PHILADELPHIA	7.53	8.78	16.94	13.97		885.00
PIKE COUNTY LIGHT & POWER	MATAMORAS	5.05	8.63	25.67	6.44	#2 OIL	565.60
PENNSYLVANIA GAS & WATER CO.	WILKES-BARRE	6.26	7.77	16.12	9.28	#2 OIL	1,078.00
UGI CORP.	READING	6.36	8.42	16.61	12.57	#2 OIL	495.26
COLUMBIA GAS OF PENNSYLVANIA	PITTSBURGH	5.73	7.05	12.31	8.19	ELECTRIC	542.00
MIDDLE ATLANTIC DIVISION		6.45	8.54	21.08	10.41		669.76
EAST NORTH CENTRAL ILLINOIS							
CENTRAL ILLINOIS LIGHT CO.	PEORIA	5.29	8.20	17.70	7.42	ELECTRIC	584.08
CENTRAL IL. PUBLIC SERVICE	QUINCY	5.29	7.55	10.20	7.47	ELECTRIC	419.00
ILLINOIS POWER CO.	DECATUR	4.57	7.12	9.20	7.64	ELECTRIC	447.30
IOWA-ILLINOIS GAS & ELECTRIC	ROCK ISLAND	4.33	6.76	19.79	6.99	PROPANE	493.62
NORTH SHORE GAS CO.	WAUKEGAN	4.85	8.73	12.12	NA	ELECTRIC	758.00
PEOPLES GAS LIGHT & COKE	CHICAGO	5.26	8.88	12.61	NA	ELECTRIC	723.00
NORTHERN ILLINOIS GAS CO.	ROCKFORD	4.50	8.30	11.14	8.86	ELECTRIC	517.00
UNITED CITIES GAS CO.	VANDALIA	5.50	6.98	19.05	8.30	#2 OIL	470.00
EAST NORTH CENTRAL INDIANA							
LAWRENCEBURG GAS CO.	LAWRENCEBURG	5.21	8.13	NA	9.28	ELECTRIC	383.00
CITIZENS GAS & COKE	INDIANAPOLIS	4.79	8.27	10.43	8.41	ELECTRIC	446.00
HOOSIER GAS CORP.	VINCENNES	5.02	7.34	13.22	9.38	#2 OIL	430.08
INDIANA GAS CO.	MUNCIE	5.96	8.00	13.16	9.01	ELECTRIC	588.58
NORTHERN IN. PUBLIC SERVICE	FORT WAYNE	4.64	7.91	15.93	8.94	ELECTRIC	446.52
OHIO VALLEY GAS CORP.	WINCHESTER	4.48	6.83	19.05	8.95	ELECTRIC	574.00
RICHMOND GAS CORP.	RICHMOND	4.32	7.69	10.76	8.40	#2 OIL	599.00
SOUTHERN INDIANA GAS & ELEC.	EVANSVILLE	4.85	6.80	13.07	8.68	ELECTRIC	502.00
MIDWEST NATURAL GAS CORP.	SCOTTSBURG	6.18	7.84	18.17	8.61	ELECTRIC	461.88

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
EAST NORTH CENTRAL							
MICHIGAN							
BATTLE CREEK GAS CO.	BATTLE CREEK	3.85	8.63	19.05	9.28	#2 OIL	567.70
CONSUMERS POWER CO.	FLINT	4.35	8.33	16.75	9.63	#2 OIL	650.00
SOUTHEASTERN MICHIGAN GAS	PORT HURON	5.39	8.02	18.97	9.51	#2 OIL	488.03
LAKE SUPERIOR DISTRICT POWER	IRONWOOD	5.12	8.20	11.96	9.48	ELECTRIC	460.00
MICHIGAN CONSOLIDATED GAS CO	DETROIT	5.11	8.49	19.34	9.88	#2 OIL	530.00
MICHIGAN POWER CO.	HOLLAND	5.22	8.16	13.04	9.31	#2 OIL	494.63
MICHIGAN GAS UTILITIES CO.	BENTON HARBOR	5.06	8.03	13.19	8.94	ELECTRIC	654.00
WISCONSIN PUBLIC SERVICE	MENOMINEE	5.51	7.31	20.43	8.76	NA	595.00
EAST NORTH CENTRAL							
OHIO							
CINCINNATI GAS & ELECTRIC	CINCINNATI	5.75	8.13	13.04	9.28	ELECTRIC	468.00
DAYTON POWER & LIGHT CO.	DAYTON	5.87	8.19	17.50	9.50	#2 OIL	648.66
EAST OHIO GAS CO.	CLEVELAND	5.15	8.63	17.58	9.83	ELECTRIC	697.00
NATIONAL GAS & OIL CORP.	NEWARK	4.95	6.11	20.52	7.64	NA	515.00
NATIONAL FUEL DISTRIBUTION	ANDOVER	5.71	8.85	21.57	10.09	#2 OIL	512.62
OHIO GAS CO.	BRYAN	6.63	8.27	20.52	8.73	ELECTRIC	635.00
RIVER GAS CO.	MARIETTA	5.34	7.65	16.47	10.85	ELECTRIC	540.80
TOLEDO EDISON CO.	DEFIANCE	5.51	8.13	20.52	9.27	ELECTRIC	440.00
WEST OHIO GAS CO.	LIMA	6.13	8.05	13.77	9.99	PROPANE	683.63
COLUMBIA GAS OF OHIO	COLUMBUS	5.87	7.42	9.03	7.95	ELECTRIC	521.00
EAST NORTH CENTRAL							
WISCONSIN							
LAKE SUPERIOR DISTRICT POWER	ASHLAND	5.28	8.13	16.44	9.61	ELECTRIC	484.00
MADISON GAS & ELECTRIC	MADISON	6.50	8.24	18.43	9.71	#2 OIL	675.00
WISCONSIN GAS CO.	MILWAUKEE	6.11	8.27	18.11	9.12	#2 OIL	578.00
NORTHERN STATES POWER CO.	EAU CLAIRE	6.40	8.20	14.21	9.06	ELECTRIC	643.00
SUPERIOR WATER,LIGHT & POWER	SUPERIOR	6.15	8.76	20.46	9.39	#2 OIL	890.00
WISCONSIN FUEL & LIGHT CO.	WAUSAU	6.24	8.35	17.10	9.17	#2 OIL	542.25
WISCONSIN POWER & LIGHT CO.	JANESVILLE	6.13	7.55	18.26	7.60	#2 OIL	523.00
WISCONSIN PUBLIC SERVICE	GREEN BAY	5.51	7.31	20.43	8.76	NA	682.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
EAST NORTH CENTRAL DIVISION		5.12	7.92	16.01	8.94		572.59
WEST NORTH CENTRAL							
IOWA							
IOWA ELECTRIC LIGHT & POWER	AMES	5.51	8.06	20.52	6.11	PROPANE	411.00
IOWA-ILLINOIS GAS & ELECTRIC	DAVENPORT	4.08	6.76	14.67	6.99	PROPANE	426.37
IOWA POWER & LIGHT CO.	DES MOINES	5.40	8.05	15.04	7.71	ELECTRIC	629.86
IOWA PUBLIC SERVICE CO.	SIOUX CITY	4.50	7.48	15.86	8.07	PROPANE	559.00
NORTH CENTRAL PUBLIC SERVICE	FORT MADISON	5.60	8.27	11.72	7.10	ELECTRIC	740.00
WEST NORTH CENTRAL							
KANSAS							
ARKANSAS LOUISIANA GAS CO.	WICHITA	3.36	6.33	13.03	8.08	ELECTRIC	216.00
MIDWEST ENERGY, INC.	HAYS	3.41	NA	13.92	6.66	NA	423.77
KN ENERGY, INC.	COLBY	2.63	8.27	21.98	8.19	ELECTRIC	349.00
KANSAS POWER & LIGHT CO.	SALINA	5.30	8.63	17.58	7.10	PROPANE	226.63
WEST NORTH CENTRAL							
MINNESOTA							
CITY OF DULUTH	DULUTH	5.28	8.27	17.00	9.61	#2 OIL	720.00
MONTANA-DAKOTA UTILITIES CO.	CROOKSTON	6.78	7.99	15.04	9.17	ELECTRIC	780.00
NORTHERN STATES POWER CO.	ST. PAUL	5.68	8.48	13.48	8.82	ELECTRIC	571.00
NORTH CENTRAL PUBLIC SERVICE	COON RAPIDS	5.40	7.91	18.17	9.17	ELECTRIC	684.00
WEST NORTH CENTRAL							
MISSOURI							
MISSOURI PUBLIC SERVICE CO.	SEDALIA	5.26	NA	10.32	NA	ELECTRIC	NA
MISSOURI UTILITIES CO.	CAPE GIRARDEAU	4.95	7.05	9.94	7.74	ELECTRIC	486.28
CITY OF SPRINGFIELD	SPRINGFIELD	5.82	5.99	16.47	7.61	NA	371.00
LACLEDE GAS CO.	ST. LOUIS	5.79	8.20	8.40	9.28	ELECTRIC	419.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
WEST NORTH CENTRAL							
NEBRASKA							
HASTINGS UTILITIES	HASTINGS	3.49	NA	17.58	NA	NA	527.35
IOWA PUBLIC SERVICE CO.	SIOUX CITY	4.52	7.48	NA	8.07	PROPANE	537.00
KN ENERGY, INC.	SCOTTSBLUFF	3.51	7.91	14.65	8.19	NA	398.00
METROPOLITAN UTILITIES	OMAHA	4.20	8.06	9.11	7.52	ELECTRIC	614.46
NORTHWESTERN PUBLIC SERVICE	GRAND ISLAND	3.50	6.55	14.36	6.88	ELECTRIC	437.00
WEST NORTH CENTRAL							
NORTH DAKOTA							
MONTANA-DAKOTA UTILITIES CO.	BISMARCK	4.43	7.19	16.74	6.99	ELECTRIC	457.00
NORTHERN STATES POWER CO.	FARGO	6.22	8.48	11.55	8.82	ELECTRIC	731.00
WEST NORTH CENTRAL							
SOUTH DAKOTA							
IOWA PUBLIC SERVICE CO.	YANKTON	4.53	7.48	12.40	8.07	PROPANE	556.00
MONTANA-DAKOTA UTILITIES CO.	RAPID CITY	4.50	5.32	12.95	7.42	PROPANE	354.00
NORTHWESTERN PUBLIC SERVICE	ABERDEEN	4.75	6.26	17.00	6.66	PROPANE	715.00
WEST NORTH CENTRAL DIVISION		5.08	7.52	14.60	7.84		470.23
SOUTH ATLANTIC							
DISTRICT OF COLUMBIA							
WASHINGTON GAS LIGHT CO.	WASHINGTON	8.16	8.63	14.03	11.56	ELECTRIC	816.00
SOUTH ATLANTIC							
DELAWARE							
DELMARVA POWER & LIGHT CO.	WILMINGTON	6.19	7.48	14.22	9.61	#2 OIL	500.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
SOUTH ATLANTIC							
FLORIDA							
PEOPLES GAS SYSTEM, INC.	MIAMI	5.40	7.05	21.98	13.10	ELECTRIC	115.00
SOUTH ATLANTIC							
GEORGIA							
ATLANTA GAS LIGHT CO.	ATLANTA	4.40	8.27	14.07	8.73	ELECTRIC	206.12
GAS LIGHT OF COLUMBUS	COLUMBUS	5.03	5.90	17.09	8.73	ELECTRIC	254.00
UNITED CITIES GAS CO.	GAINESVILLE	5.70	5.90	17.00	8.73	ELECTRIC	375.00
SOUTH ATLANTIC							
MARYLAND							
BALTIMORE GAS & ELECTRIC	BALTIMORE	6.55	8.71	16.74	6.21	ELECTRIC	484.00
WASHINGTON GAS LIGHT CO.	HYATTSVILLE	7.25	8.63	15.76	11.56	ELECTRIC	991.07
COLUMBIA GAS OF MARYLAND	HAGERSTOWN	7.31	8.05	16.03	8.19	ELECTRIC	607.00
SOUTH ATLANTIC							
NORTH CAROLINA							
PIEDMONT NATURAL GAS CO.	CHARLOTTE	6.40	NA	NA	NA	NA	464.00
PUBLIC SERVICE OF NC	RALEIGH	6.00	7.84	17.44	10.04	ELECTRIC	622.00
CITY OF WILSON	WILSON	5.76	6.83	18.84	9.28	#2 OIL	471.15
NORTH CAROLINA NATURAL GAS	FAYETTEVILLE	6.00	7.55	17.58	9.93	ELECTRIC	358.00
SOUTH ATLANTIC							
SOUTH CAROLINA							
PIEDMONT NATURAL GAS CO.	GREENVILLE	6.32	NA	NA	NA	NA	421.00
COMMISSION OF PUBLIC WORKS	GREENWOOD	5.10	7.91	12.31	9.93	ELECTRIC	285.00
SOUTH CAROLINA ELEC. & GAS	COLUMBIA	6.00	8.27	19.93	10.04	#2 OIL	200.00
UNITED CITIES GAS CO.	GAFFNEY	6.30	6.83	13.19	8.73	ELECTRIC	400.00
SOUTH ATLANTIC							
VIRGINIA							

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
CITY OF CHARLOTTESVILLE	CHARLOTTESVILLE	6.71	8.34	19.64	9.72	ELECTRIC	650.00
CITY OF DANVILLE	DANVILLE	4.90	8.36	12.45	9.17	ELECTRIC	284.90
CITY OF RICHMOND	RICHMOND	6.93	8.77	20.50	10.04	ELECTRIC	684.00
ROANOKE GAS CO.	ROANOKE	5.89	8.13	15.39	9.17	ELECTRIC	587.40
UNITED CITIES GAS CO.	BRISTOL	5.40	7.05	13.77	8.73	ELECTRIC	550.00
COLUMBIA GAS OF VIRGINIA	STAUNTON	5.73	7.98	14.66	9.66	ELECTRIC	431.00
WASHINGTON GAS LIGHT CO.	ALEXANDRIA	7.40	8.63	14.66	11.56	ELECTRIC	680.20
SOUTH ATLANTIC							
WEST VIRGINIA							
EQUITABLE GAS CO.	GRAFTON	5.21	NA	NA	NA	ELECTRIC	407.00
HOPE NATURAL GAS CO.	PARKERSBURG	5.69	8.13	12.70	10.37	ELECTRIC	480.00
COLUMBIA GAS OF WV	CHARLESTON	6.04	6.86	12.09	9.06	ELECTRIC	477.00
SOUTH ATLANTIC DIVISION		5.85	7.75	15.92	9.66		441.24
EAST SOUTH CENTRAL							
ALABAMA							
ALABAMA GAS CORP.	BIRMINGHAM	5.37	6.83	14.95	9.28	ELECTRIC	497.23
MOBILE GAS SERVICE CORP.	MOBILE	6.31	7.05	19.49	9.28	ELECTRIC	193.00
CITY OF HUNTSVILLE	HUNTSVILLE	5.42	8.70	13.25	8.73	ELECTRIC	408.00
DECATUR UTILITIES	DECATUR	5.22	NA	10.47	8.08	ELECTRIC	280.00
CITY OF FLORENCE	FLORENCE	5.84	7.99	14.65	9.28	ELECTRIC	409.00
CITY OF FULTONDALE	FULTONDALE	NA	NA	NA	NA	ELECTRIC	650.00
SOUTHEAST ALABAMA GAS	ANDALUSIA	4.85	5.79	21.25	9.39	ELECTRIC	220.00
EAST SOUTH CENTRAL							
KENTUCKY							
COLUMBIA GAS OF KENTUCKY	LEXINGTON	6.27	7.77	12.92	9.83	ELECTRIC	450.00
UNION LIGHT,HEAT & POWER	COVINGTON	5.88	8.13	13.42	9.28	ELECTRIC	513.00
EQUITABLE GAS CO.	RURAL	3.79	NA	NA	NA	ELECTRIC	NA
LOUISVILLE GAS & ELECTRIC	LOUISVILLE	4.68	8.19	10.92	9.28	ELECTRIC	397.72

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
WESTERN KENTUCKY GAS CO.	OWENSBORO	4.77	NA	16.41	8.95	ELECTRIC	326.00
DELTA NATURAL GAS CO.	WINCHESTER	5.25	7.91	14.65	9.28	ELECTRIC	380.00
EAST SOUTH CENTRAL MISSISSIPPI							
ENTEX, INC.	GULFPORT	5.52	NA	19.64	10.37	ELECTRIC	298.08
MISSISSIPPI VALLEY GAS CO.	JACKSON	5.58	7.05	17.64	9.28	ELECTRIC	367.68
EAST SOUTH CENTRAL TENNESSEE							
MEMPHIS LIGHT,GAS & WATER	MEMPHIS	4.85	7.19	13.92	10.92	PROPANE	392.00
NASHVILLE GAS CO.	NASHVILLE	5.24	7.55	13.80	10.92	ELECTRIC	530.00
UNITED CITIES GAS CO.	COLUMBIA	5.60	7.05	13.19	8.73	ELECTRIC	400.00
MIDDLE TENNESSEE NATURAL GAS	SMITHVILLE	6.05	6.11	13.95	8.84	ELECTRIC	525.00
JACKSON UTILITY DIVISION	JACKSON	4.86	8.35	13.57	9.93	ELECTRIC	341.55
EAST SOUTH CENTRAL DIVISION		5.31	7.44	14.89	9.43		402.14
WEST SOUTH CENTRAL ARKANSAS							
ARKANSAS LOUISIANA GAS CO.	LITTLE ROCK	4.29	6.01	11.68	9.01	ELECTRIC	246.00
ARKANSAS WESTERN GAS CO.	FAYETTEVILLE	3.01	NA	21.40	8.73	ELECTRIC	323.76
ARKANSAS OKLAHOMA GAS CORP.	FORT SMITH	2.71	NA	NA	8.52	ELECTRIC	224.00
WEST SOUTH CENTRAL LOUISIANA							
ARKANSAS LOUISIANA GAS CO.	SHREVEPORT	4.45	6.26	14.89	8.73	ELECTRIC	253.00
TRANS LOUISIANA GAS CO.	LAFAYETTE	4.81	NA	16.79	NA	ELECTRIC	197.00
NEW ORLEANS PUBLIC SERVICE	NEW ORLEANS	5.96	NA	17.26	NA	ELECTRIC	NA
ENTEX, INC.	LAKE CHARLES	5.64	NA	22.71	10.37	ELECTRIC	242.52

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
WEST SOUTH CENTRAL							
OKLAHOMA							
ARKANSAS LOUISIANA GAS CO.	LAWTON	4.17	6.51	13.10	9.28	ELECTRIC	232.00
ARKANSAS OKLAHOMA GAS CORP.	POTEAU	3.09	NA	NA	8.52	ELECTRIC	161.00
LONE STAR GAS CO.	DURANT	3.34	NA	23.15	8.52	ELECTRIC	190.48
OKLAHOMA NATURAL GAS CO.	OKLAHOMA CITY	3.60	NA	11.90	7.64	ELECTRIC	262.80
WEST SOUTH CENTRAL							
TEXAS							
ARKANSAS LOUISIANA GAS CO.	TEXARKANA	3.79	7.05	14.95	9.50	ELECTRIC	180.00
CITY OF CORPUS CHRISTI	CORPUS CHRISTI	5.70	NA	26.38	9.61	ELECTRIC	135.00
LONE STAR GAS CO.	DALLAS	4.90	NA	19.78	8.52	ELECTRIC	289.30
ENTEX, INC.	HOUSTON	5.96	NA	22.71	10.37	ELECTRIC	220.52
ENERGAS CO.	LUBBOCK	4.43	NA	16.09	8.73	ELECTRIC	353.18
WEST SOUTH CENTRAL DIVISION		4.83	6.46	18.06	9.00		256.44
MOUNTAIN							
ARIZONA							
ARIZONA PUBLIC SERVICE CO.	PHOENIX	4.51	6.47	19.76	13.32	ELECTRIC	315.22
SOUTHWEST GAS CORP.	TUCSON	6.44	6.85	15.27	10.35	ELECTRIC	193.00
MOUNTAIN							
COLORADO							
CITY OF COLORADO SPRINGS	COLORADO SPRINGS	4.68	10.72	11.58	8.84		345.09
KN ENERGY, INC.	YUMA	3.86	8.63	14.65	8.73	ELECTRIC	462.00
PUBLIC SERVICE OF COLORADO	DENVER	2.80	5.68	21.76	10.15	ELECTRIC	323.34
MOUNTAIN							
IDAHO							

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
WASHINGTON WATER POWER CO.	LEWISTON	6.04	NA	7.12	NA	#2 OIL	428.00
INTERMOUNTAIN GAS CO.	BOISE	6.47	7.98	11.33	9.28	ELECTRIC	415.00
MOUNTAIN / MONTANA							
MONTANA-DAKOTA UTILITIES CO.	BILLINGS	4.41	7.84	11.28	8.94	ELECTRIC	406.00
MONTANA POWER CO.	MISSOULA	4.67	7.92	10.58	8.76	ELECTRIC	346.06
MOUNTAIN / NEW MEXICO							
GAS CO. OF NEW MEXICO	ALBUQUERQUE	3.37	9.06	22.71	4.93	ELECTRIC	427.00
MOUNTAIN / NEVADA							
SIERRA PACIFIC POWER CO.	RENO	5.64	8.06	21.10	11.26	#2 OIL	289.58
SOUTHWEST GAS CORP.	LAS VEGAS	5.93	7.84	20.19	10.91	ELECTRIC	483.00
MOUNTAIN / UTAH							
MOUNTAIN FUEL SUPPLY CO.	SALT LAKE CITY	4.09	7.33	17.15	8.91	ELECTRIC	383.31
MOUNTAIN / WYOMING							
KN ENERGY, INC.	DOUGLAS	3.56	8.63	17.58	5.46	NA	469.00
MONTANA-DAKOTA UTILITIES CO.	SHERIDAN	4.30	8.49	6.30	7.97	ELECTRIC	412.00
MOUNTAIN FUEL SUPPLY CO.	ROCK SPRINGS	3.53	7.88	10.35	9.12	ELECTRIC	433.97
WYOMING GAS CO.	WORLAND	4.05	6.98	10.33	7.30	ELECTRIC	368.55
NORTHERN GAS DIVISION	CASPER	4.93	NA	10.35	8.30	ELECTRIC	638.52
MOUNTAIN DIVISION		4.15	7.90	14.41	8.97		357.97

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31				PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
		NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE		
PACIFIC							
CALIFORNIA							
CITY OF LONG BEACH	LONG BEACH	3.08	NA	18.05	7.32	ELECTRIC	67.00
PACIFIC GAS AND ELECTRIC	SAN FRANCISCO	4.39	3.09	21.66	12.01	PROPANE	285.00
SAN DIEGO GAS & ELECTRIC CO.	SAN DIEGO	4.48	6.38	26.35	9.93	NA	85.00
SOUTHWEST GAS CORP.	VICTORVILLE	7.67	7.57	22.30	10.90	PROPANE	535.00
SOUTHERN CALIFORNIA GAS CO.	LOS ANGELES	4.68	NA	22.04	9.83	ELECTRIC	185.80
PACIFIC							
OREGON							
NORTHWEST NATURAL GAS CO.	PORTLAND	6.50	7.91	11.72	9.61	ELECTRIC	355.00
PACIFIC							
WASHINGTON							
NORTHWEST NATURAL GAS CO.	VANCOUVER	6.19	7.91	6.15	9.61	ELECTRIC	355.00
WASHINGTON WATER POWER CO.	SPOKANE	5.95	NA	7.62	NA	#2 OIL	518.00
WASHINGTON NATURAL GAS CO.	SEATTLE	6.84	8.35	10.46	NA	ELECTRIC	602.00
PACIFIC DIVISION		4.68	6.87	16.26	9.89		235.82